EOSD RbR to L4 traceability (1 of 200)

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
EOSD0010#A	ECS shall use and support the Space Network (SN), via the EDOS/Ecom interface, to obtain the forward and return link data communications needed to achieve full end-to-end ECS functionality.	A: ONLY THE GSFC AND LARC DAACS WILL INTERFACE WITH EDOS	C-ISS-01195	A	The ISS shall provide for connectivity with Ecom at the following ECS sites: a. GSFC DAAC b. GSFC EOC c. LaRC DAAC d. MSF DAAC
			F-PAS-00700	A	The FOS shall provide the capability for an authorized user to plan spacecraft communication contacts.
			F-FUI-04010	A	The FOS shall provide the capability to display TDRSS availability for a specified time period on a timeline display.
			F-PAS-10400	A	The EOC shall provide the capability to schedule communication contacts with TDRSS through the NCC.
			F-PAS-10405	A	The EOC shall provide the capability to receive TDRSS contact times from the NCC.
EOSD0010#B	ECS shall use and support the Space Network (SN), via the EDOS/Ecom interface, to obtain the forward and return link data communications needed to achieve full end-to-end ECS functionality.	B: ONLY THE GSFC AND LARC DAACS WILL INTERFACE WITH EDOS	F-FOS-00010	B	The EOC shall use and support the Space Network (SN), via the EDOS/Ecom interface, to obtain the forward and return link data communications needed to achieve full FOS functionality.
			F-PAS-00700	A	The FOS shall provide the capability for an authorized user to plan spacecraft communication contacts.
			F-FUI-04010	A	The FOS shall provide the capability to display TDRSS availability for a specified time period on a timeline display.
			F-PAS-10400	A	The EOC shall provide the capability to schedule communication contacts with TDRSS through the NCC.
			F-PAS-10405	A	The EOC shall provide the capability to receive TDRSS contact times from the NCC.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-ISS-11195	B	The ISS shall provide for connectivity with EBnet at the following ECS sites: a. GSFC DAAC b. GSFC EOC c. GSFC SMC d. LaRC DAAC e. MSF DAAC f. JPL DAAC g.ASF DAAC h. NSIDC DAAC i. EDC DAAC
EOSD0015#A	ECS shall use and support the Deep Space Network (DSN), the Ground Network (GN), and the Wallops Orbital Tracking Station (WOTS), via the EDOS/Ecom/Nascom interface, as backup of the SN, to obtain forward and return link data communications.	ONLY THE GSFC AND LARC DAACS WILL INTERFACE WITH EDOS	C-ISS-01195	A	The ISS shall provide for connectivity with Ecom at the following ECS sites: a. GSFC DAAC b. GSFC EOC c. LaRC DAAC d. MSF DAAC
			F-PAS-00700	A	The FOS shall provide the capability for an authorized user to plan spacecraft communication contacts.
			F-PAS-10410	A	The EOC shall provide the capability to schedule DSN communication contacts through the NCC.
			F-PAS-10415	A	The EOC shall provide the capability to receive DSN contact times from the NCC.
			F-PAS-10420	A	The EOC shall provide the capability to schedule communication contacts through the NCC.
			F-PAS-10425	A	The EOC shall provide the capability to receive GN contact times from the NCC.
			F-PAS-10430	A	The EOC shall provide the capability to schedule communication contacts through the NCC.
			F-PAS-10435	A	The EOC shall provide the capability to receive WOTS contact times from the NCC.
EOSD0015#B	ECS shall use and support the Deep Space Network (DSN), the Ground Network (GN), and the Wallops Orbital Tracking Station (WOTS), via the EDOS/Ecom/Nascom interface, as backup of the SN, to obtain forward and return link data communications.	A&B: ONLY THE GSFC AND LARC DAACS WILL INTERFACE WITH EDOS	F-FOS-00015	B	The EOC shall use and support the Deep Space Network (DSN), the Ground Network (GN), and the Wallops Orbital Tracking Station (WOTS), via the EDOS/ Ecom/Nascom interface, as backup of the SN, to obtain forward and return link data communications.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			F-FOS-00630		(see NASA Inst. IRD, rqmt #N1-0250): The FOS shall be expandable to support the capability to communicate with the DSN and WOTS to schedule support for EOS spacecraft (in accordance with NASA policy and procedures)
			F-PAS-00700	A	The FOS shall provide the capability for an authorized user to plan spacecraft communication contacts.
			F-PAS-10410	A	The EOC shall provide the capability to schedule DSN communication contacts through the NCC.
			F-PAS-10415	A	The EOC shall provide the capability to receive DSN contact times from the NCC.
			F-PAS-10420	A	The EOC shall provide the capability to schedule communication contacts through the NCC.
			F-PAS-10425	A	The EOC shall provide the capability to receive GN contact times from the NCC.
			F-PAS-10430	A	The EOC shall provide the capability to schedule communication contacts through the NCC.
			F-PAS-10435	A	The EOC shall provide the capability to receive WOTS contact times from the NCC.
			C-ISS-11195	B	The ISS shall provide for connectivity with EBnet at the following ECS sites: a. GSFC DAAC b. GSFC EOC c. GSFC SMC d. LaRC DAAC e. MSF DAAC f. JPL DAAC g.ASF DAAC h. NSIDC DAAC i. EDC DAAC
EOSD0020#A	ECS shall use and support the EDOS/Ecom interface to obtain the data capture, data archival, and data distribution services needed to achieve full end-to-end ECS functionality.		F-FOS-00020	A	The EOC shall use and support the EDOS/Ecom interface to obtain the data formatting services, data distribution services, and data quality and accounting services needed to achieve full FOS functionality.
			F-FOS-00025	A	The EOC shall use Ecom for flight operations data transfers.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
EOSD0020#B	ECS shall use and support the EDOS/Ecom interface to obtain the data capture, data archival, and data distribution services needed to achieve full end-to-end ECS functionality.		F-FOS-00020	A	The EOC shall use and support the EDOS/Ecom interface to obtain the data formatting services, data distribution services, and data quality and accounting services needed to achieve full FOS functionality.
			F-FOS-00025	A	The EOC shall use Ecom for flight operations data transfers.
			C-ISS-11195	B	The ISS shall provide for connectivity with EBnet at the following ECS sites: a. GSFC DAAC b. GSFC EOC c. GSFC SMC d. LaRC DAAC e. MSF DAAC f. JPL DAAC g.ASF DAAC h. NSIDC DAAC i. EDC DAAC
EOSD0025#A	ECS shall use Ecom for flight operations data transfers.		F-FOS-00320	B	The EOC shall use Ecom for data communications for the following types of data: a. Real-time telemetry data, rate-buffered telemetry data b. Command data c. TDRSS schedule requests and TDRSS schedules d. Data exchange with the FDF, NCC and EDOS
EOSD0025#B	ECS shall use Ecom for flight operations data transfers.		F-FOS-00320	B	The EOC shall use Ecom for data communications for the following types of data: a. Real-time telemetry data, rate-buffered telemetry data b. Command data c. TDRSS schedule requests and TDRSS schedules d. Data exchange with the FDF, NCC and EDOS
EOSD0030#A	ECS shall, during its lifetime, ingest, archive distribute and provide search and access for EOS TRMM, Landsat 7 (including IGS metadata and browse) and related non-EOS data and products.		C-HRD-11335	A	The Enterprise Monitoring Server data storage shall be capable of archiving data to the ECS data server archive for data archive.
			C-HRD-12345	A	The Local Management Server data archive shall adhere to ECS Data Server archival requirements for data storage and retrieval.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-HRD-11345	A	The Enterprise Monitoring Server data archive shall adhere to ECS data server archival requirements for data storage and retrieval.
			C-HRD-11530	A	The Enterprise Monitoring Server peripherals shall support at least one tape drive.
			C-HRD-11535	A	The Enterprise Monitoring Server peripheral tape drive shall have the following characteristics: a. 4mm Digital Audio Tape format b. Accept industry standard magnetic 4mm DAT (i.e. DDS-90) c. Data transfer rate of 200KB/sec
			C-HRD-11540	A	The Enterprise Monitoring Server tape drives shall be upgradeable/replaceable within the same product family.
			C-HRD-12335	A	The Local Management Server data storage shall be capable of archiving data to the ECS Data Server archive for data archive.
			C-HRD-12530	A	The Local Management Server peripherals shall support at least one tape drive.
			C-HRD-12535	A	The Local Management Server peripheral tape drive shall have the following characteristics: a. 4mm Digital Audio Tape format b. Accept industry standard magnetic 4mm DAT (i.e. DDS-90) c. Data transfer rate of 200KB/sec
			C-HRD-12540	A	The Local Management Server tape drives shall be upgradeable/replaceable within the same product family.
			C-HRD-22345	A	The Local Communications Server data archive shall adhere to ECS Data Server archival requirements for data storage and retrieval.
			C-HRD-21335	A	The Enterprise Communications Server data storage shall be capable of archiving data to the ECS Data Server archive for data archive.
			C-HRD-21345	A	The Enterprise Communications Server data archive shall adhere to ECS data server archival requirements for data storage and retrieval.
			C-HRD-21530	A	The Enterprise Communications Server peripherals shall support at least one tape drive.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-HRD-21535	A	The Enterprise Communications Server peripheral tape drive shall have the following characteristics: a. 4mm Digital Audio Tape format b. Accept industry standard magnetic 4mm DAT (i.e. DDS-90) c. Data transfer rate of 200KB/sec
			C-HRD-21540	A	The Enterprise Communications Server tape drives shall be upgradeable/replaceable within the same product family.
			C-HRD-22335	A	The Local Communications Server data storage shall be capable of archiving data to the ECS Data Server archive.
			C-HRD-22530	A	The Local Communications Server peripherals shall support at least one tape drive.
			C-HRD-22535	A	The Local Communications Server peripheral tape drive shall have the following characteristics: a. 4mm Digital Audio Tape format b. Accept industry standard magnetic 4mm DAT (i.e. DDS-90) c. Data transfer rate of 200KB/sec
			C-HRD-22540	A	The Local Communications Server tape drives shall be upgradeable/replaceable within the same product family.
			C-HRD-23320	A	The Bulletin Board Server data archive shall adhere to ECS data server archival requirements for data storage and retrieval.
			C-HRD-23530	A	The Bulletin Board Server peripherals shall support at least one tape drive.
			C-HRD-23535	A	The Bulletin Board Server peripheral tape drive shall have the following characteristics: a. 4mm Digital Audio Tape format b. Accept industry standard magnetic 4mm DAT (i.e. DDS-90) c. Data transfer rate of 200KB/sec
			C-HRD-23540	A	The Bulletin Board Server tape drives shall be upgradeable/replaceable within the same product family.
			S-INS-00780	A	The INGST CI shall ingest data, provided by the Landsat 7 Processing Facility (LPS), from the ESN into the EDC DAAC using a file transfer protocol.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
EOSD0030#B	ECS shall, during its lifetime, ingest, archive distribute and provide search and access for EOS TRMM, Landsat 7 (including IGS metadata and browse) and related non-EOS data and products.		S-INS-00780	A	The INGST CI shall ingest data, provided by the Landsat 7 Processing Facility (LPS), from the ESN into the EDC DAAC using a file transfer protocol.
			C-CSS-02430	B	The CSS-DCHW CI Enterprise Communications Server tape drives shall be upgradeable/replaceable within the same product family.
			C-CSS-03030	B	The CSS-DCHW CI Local Communications Server tape drives shall be upgradeable/replaceable within the same product family.
			C-CSS-03420	B	The CSS-DCHW CI Bulletin Board Server data archive shall adhere to ECS data server archival requirements for data storage and retrieval.
			C-CSS-03500	B	The CSS-DCHW CI Bulletin Board Server peripherals shall support at least one tape drive.
			C-CSS-03510	B	The CSS-DCHW CI Bulletin Board Server peripheral tape drive shall have the following characteristics: a. 4mm Digital Audio Tape format b. Accept industry standard magnetic 4mm DAT (i.e. DDS-90)
			C-CSS-03520	B	The CSS-DCHW CI Bulletin Board Server shall provide a peripheral tape drive.
			C-CSS-03530	B	The CSS-DCHW CI Bulletin Board Server tape drives shall be upgradeable/replaceable within the same product family.
			C-MSS-03000	B	The MSS-MHW CI Local Management Server peripherals shall support at least one tape drive.
			C-MSS-03030	B	The MSS-MHW CI Local Management Server tape drives shall be upgradeable/replaceable within the same product family.
			S-INS-00785	B	The INGST CI shall ingest Data, provided by the Landsat 7 Image Assessment System (IAS), from the LAN into the EDC DAAC using a file transfer protocol.
			S-INS-00787	B	The INGST CI shall ingest Data, provided by the Landsat 7 International Ground Stations (IGSs), into the EDC DAAC on 8 mm cartridge tape.
EOSD0040#A	ECS shall provide users without prior approved accounts access to the system for descriptive information about ECS and the types of data it contains.	A: via BB or EDHS	C-CSS-62030	IR1	The CSS Bulletin Board Service shall provide concurrent access to multiple users (registered or non-registered).

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-CSS-63040	IR1	The CSS Virtual Terminal shall provide guest access to non-registered users to log into the ECS guest server.
EOSD0040#B	ECS shall provide users without prior approved accounts access to the system for descriptive information about ECS and the types of data it contains.		C-CSS-62030	IR1	The CSS Bulletin Board Service shall provide concurrent access to multiple users (registered or non-registered).
			C-CSS-63040	IR1	The CSS Virtual Terminal shall provide guest access to non-registered users to log into the ECS guest server.
EOSD0500#A	ECS shall perform the following major functions: a. EOS Mission Planning and Scheduling b. EOS Mission Operations c. Command and Control d. Communications and Networking e. Data Input f. Data Processing g. Data Storage h. Data Distribution i. Information Management j. End-to-End Fault Management k. System Management	This "high level" requirement covers almost all capabilities provided by ECS. Only selected software and hardware requirements are mapped to this requirement. Additional software requirements are mapped to "lower level" RBRs which are more specific.	C-MSS-16010	A	MSS Monitor/Control Service shall communicate via ECS management protocol with the Management Agent Service in test or operational mode.
			C-MSS-18040	A	The MSS Management Data Access Service shall maintain the integrity of the management database.
			C-MSS-18070	A	The MSS Management Data Access Service shall provide the capability to selectively access management data.
			C-MSS-18200	A	The MSS Management Data Access Service shall provide the capability for an application via APIs to update fields in the management database.
			C-MSS-18220	A	The MSS Management Data Access Service shall provide the capability for an application via APIs to alter tables and fields in the management database.
			C-MSS-18260	A	The MSS Management Data Access Service shall have the capability to schedule the transfer and loading log files into the management database at the site.
			C-MSS-18270	A	The MSS Management Data Access Service shall have the capability to schedule the archiving of log files at the site.
			C-MSS-18280	A	The MSS Management Data Access Service shall have the capability to schedule the transfer of management data at the sites to the SMC.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-18340	A	The MSS Management Data Access Service shall provide the capability for an application to selectively read a record from a log file
			C-MSS-18350	A	The MSS Management Data Access Service shall provide the capability for an application to load log files into the management database at the site
			C-MSS-60350	A	The MSS Fault Management Application Service shall have the capability to periodically execute diagnostic tests in order to isolate, characterize and identify a fault.
			C-MSS-60520	A	The MSS Fault Management Application Service shall provide the capability to allow the specification and execution of action routines in response to the notification of a fault.
			C-MSS-60610	A	The MSS Fault Management Application Service shall have the capability to build histories for different types of errors and events detected, for the purpose of analysis.
			C-MSS-36080	A	The MSS Management Agent Service shall provide an extensible ECS management agent for ECS Host systems
			C-MSS-36090	A	The MSS Management Agent Service shall provide an extensible ECS management agent for ECS applications
			C-MSS-36100	A	The MSS Management Agent Service shall provide proxy agents for ECS network devices and applications that cannot be managed via SNMP.
			C-MSS-36110	A	The MSS Management Agent Service shall provide an ECS domain manager agent to coordinate and communicate with multiple ECS management agents.
			C-CSS-63050	A	The CSS Virtual Terminal shall support kerberized version of the telnet protocol for secure authentication of users.
			C-CSS-01000	A	The CSS DOF Service shall provide a standards-based Interface Definition Language (IDL) and language mappings to at least C and C++ (limited) languages.
			C-CSS-01010	A	The CSS DOF provided IDL shall support versioning of the interface supporting minor and major versions.
			C-CSS-01020	A	The IDL supported minor versioning shall be upward compatible that requires no changes in the client software to communicate with the new implementation.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-CSS-01030	A	The CSS DOF Service shall support the passing of the general error status as a parameter in calls between the clients and servers automatically.
			C-CSS-01040	A	The CSS DOF Service shall provide the capability to marshal and unmarshal the arguments and the returned value transparently while making a remote procedure call.
			C-CSS-01050	A	The CSS DOF Service shall provide the capability to marshal and unmarshal standard types to/from a common standard format.
			C-CSS-01060	A	The CSS DOF Service shall provide the capability to define marshaling and unmarshaling routines for user defined types.
			C-CSS-01070	A	The CSS DOF Service shall provide server APIs to register/unregister services in the namespaces (in different administrative domains) under different views (server/group/profile).
			C-CSS-01080	A	The CSS DOF Service shall provide server APIs to register/unregister different implementations of an interface in the namespace.
			C-CSS-01090	A	The CSS DOF Service shall provide server APIs to register/unregister individual objects implementing an interface in the namespace.
			C-CSS-01100	A	The CSS DOF Service shall provide server APIs to register their services using different protocols in the namespace.
			C-CSS-01110	A	The CSS DOF Service shall provide server APIs to register their services with the local endpoint mapper with the proper port number.
			C-CSS-01120	A	The CSS DOF Service shall provide mechanisms to shutdown a service gracefully, by allowing the servers to unregister the server information from the namespace.
			C-CSS-01130	A	The CSS DOF Service shall provide server APIs to limit the maximum number of threads to use in servicing the requests concurrently.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-CSS-01140	A	The CSS DOF Service shall provide client APIs to bind to services (registered in the local namespace as well as remote namespaces) by using any of the following information to achieve location transparency of services. a. a service name b. an interface name c. an object name d. a host name and communication protocol e. an object reference
			C-CSS-01150	A	The CSS DOF Service shall return gracefully by throwing an exception or returning an error code when it can not retrieve the binding information or can not resolve a binding.
			C-CSS-01160	A	The CSS DOF Service shall provide client APIs to specify a confidence level of the binding information as follows: a. a low confidence level indicating the use of a local cache to obtain binding information b. a medium confidence level indicating the DOF to get the binding information from any of the directory replicas. c. a high confidence level indicating the DOF to get the binding information from the master copy of the directory services.
			C-CSS-01170	A	The CSS DOF Service shall provide APIs to set/get the authentication service type to be used between the server and the client.
			C-CSS-01180	A	The CSS DOF Service shall provide APIs to set/get authorization service type to be used between the client and the server.
			C-CSS-01190	A	The CSS DOF Service shall provide APIs to maintain the integrity of the data to be passed between the client and the server.
			C-CSS-01200	A	The CSS DOF Service shall provide APIs to maintain the privacy of the data passed between the client and the server by encrypting and decrypting the data.
			C-CSS-01210	A	The CSS DOF Service shall provide APIs to set the identity of a given principal to a given process.
			C-CSS-01220	A	The CSS DOF shall support the TCP and UDP communication protocols to communicate between the servers and the clients.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-CSS-60530	A	The CSS File Access Service shall support the kerberized version of File Transfer Protocol for secured file transfers.
			C-HRD-31000	A	The ISS shall provide LANs at the following Release A sites: a. GSFC DAAC LAN b. GSFC EOC LAN c. EDC DAAC LAN d. LaRC DAAC LAN e. MSFC DAAC LAN f. GSFC SMC LAN
			C-MSS-18060	A	The Management Data Access Service shall provide the capability for an application to access management data.
			F-FOS-00010	B	The EOC shall use and support the Space Network (SN), via the EDOS/Ecom interface, to obtain the forward and return link data communications needed to achieve full FOS functionality.
			C-MSS-16020	IR1	The MSS Monitor/Control Service shall communicate via ECS management protocol with the MSS Management Agent Service to request management data on a managed object.
			C-MSS-16030	IR1	The MSS Monitor/Control Service shall be able to communicate via ECS management protocol with the MSS Management Agent Service to send ECS management set messages to configure and control the processing performed by the ECS management agent.
			C-MSS-16060	IR1	The MSS Monitor/Control Service shall allow the capability to set thresholds on managed resources that are monitored
			C-MSS-36020	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to respond to requests for managed object MIB attributes
			C-MSS-36050	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to receive ECS management set message from the Monitor/Control Service.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-60130	IR1	The MSS Fault Management Application Service shall provide the capability to detect the following types of faults, errors and events: a. communications software version mismatch errors b. communication software configuration errors c. the following errors in communication hardware: 1. host not reachable 2. router not reachable 3. errors and failures of communication links d. Errors in the communications protocols supported e. degradation of performance due to established thresholds being exceeded f. Peripherals g. Databases h. Applications: 1. process missing (Application or COTS product) 2. process in a loop 3. process failed
			C-MSS-36040	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to send ECS management traps/events to the Monitor/Control Service.
			C-CSS-60520	IR1	The CSS File Access Service shall support the File Transfer Protocol (FTP).
			C-MSS-12005	IR1	The MSS Management User Interface (MUI) Service shall be compatible with the ECS management framework.
			C-MSS-14010	IR1	The MSS Maps/Collection Service shall retain the status of managed objects and their relationship to symbols that comprise a graphical representation of the physical network topology.
			C-MSS-20010	IR1	The MSS Discovery Service shall discover (via network protocol) new instances of managed objects.
			C-MSS-16040	IR1	The MSS Monitor/Control Service shall communicate via ECS management protocol with the MSS Management Agent Service to receive ECS management traps/events.
			C-MSS-20030	IR1	The MSS Discovery Service shall report missing occurrences of managed objects.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-16050	IR1	The MSS Monitor/Control Service shall allow customized M&O staff-event notifications and automatic actions.
			C-MSS-16070	IR1	The MSS Monitor/Control Service shall automatically report when a threshold has been exceeded by generating a ECS management event
			C-MSS-36060	IR1	The MSS Management Agent Service shall provide an ECS management agent that is configurable to include: a. Community to respond to and set attributes b. Agent location & contact person c. Traps to send d. Events to log & log file name
			C-MSS-14030	IR1	The MSS Map/Collection Service shall provide a capability to define a hierarchical relationship between maps and sub-maps (i.e., a graphical hierarchical tree)
			S-DPS-70030	IR1	The AITHW CI shall provide hardware resources to operations staff for the monitor and control of Science Software configuration management.
			C-MSS-18050	A	The MSS Management Data Access Service's shall utilize CSS Services to access/transfer management data.
			C-MSS-14020	IR1	The MSS Map/Collection Service shall provide a capability to define maps and objects.
			C-MSS-60010	IR1	The MSS Fault Management Application Service shall provide the capability to create and display graphical representations of a given network topology consisting of the following: a. routers b. communication lines c. hosts d. peripherals e. applications
			C-MSS-60110	IR1	The MSS Fault Management Application Service shall be capable of receiving fault notifications.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-60200	IR1	The MSS Fault Management Application Service shall have the capability to generate the following types of notifications for detected faults : a. a change in the color of an icon on a display b. a message in a pop-up notification window c. logging the following fault information to a disk log file: 1. fault type 2. date and time of occurrence of the fault 3. identification of the source of the notification (e.g. IP address, process name, etc.) 4. fault data received with the notification 5. operator-defined descriptive text d. audible alert
EOSD0500#B	ECS shall perform the following major functions: a. EOS Mission Planning and Scheduling b. EOS Mission Operations c. Command and Control d. Communications and Networking e. Data Input f. Data Processing g. Data Storage h. Data Distribution i. Information Management j. End-to-End Fault Management k. System Management	This "high level" requirement covers almost all capabilities provided by ECS. Only selected software and hardware requirements are mapped to this requirement. Additional software requirements are mapped to "lower level" RBRs which are more specific.	C-MSS-16010	A	MSS Monitor/Control Service shall communicate via ECS management protocol with the Management Agent Service in test or operational mode.
			C-MSS-18040	A	The MSS Management Data Access Service shall maintain the integrity of the management database.
			C-MSS-18070	A	The MSS Management Data Access Service shall provide the capability to selectively access management data.
			C-MSS-18200	A	The MSS Management Data Access Service shall provide the capability for an application via APIs to update fields in the management database.
			C-MSS-18220	A	The MSS Management Data Access Service shall provide the capability for an application via APIs to alter tables and fields in the management database.
			C-MSS-18260	A	The MSS Management Data Access Service shall have the capability to schedule the transfer and loading log files into the management database at the site.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-18270	A	The MSS Management Data Access Service shall have the capability to schedule the archiving of log files at the site.
			C-MSS-18280	A	The MSS Management Data Access Service shall have the capability to schedule the transfer of management data at the sites to the SMC.
			C-MSS-18340	A	The MSS Management Data Access Service shall provide the capability for an application to selectively read a record from a log file
			C-MSS-18350	A	The MSS Management Data Access Service shall provide the capability for an application to load log files into the management database at the site
			C-MSS-60350	A	The MSS Fault Management Application Service shall have the capability to periodically execute diagnostic tests in order to isolate, characterize and identify a fault.
			C-MSS-60520	A	The MSS Fault Management Application Service shall provide the capability to allow the specification and execution of action routines in response to the notification of a fault.
			C-MSS-60610	A	The MSS Fault Management Application Service shall have the capability to build histories for different types of errors and events detected, for the purpose of analysis.
			C-MSS-36080	A	The MSS Management Agent Service shall provide an extensible ECS management agent for ECS Host systems
			C-MSS-36090	A	The MSS Management Agent Service shall provide an extensible ECS management agent for ECS applications
			C-MSS-36100	A	The MSS Management Agent Service shall provide proxy agents for ECS network devices and applications that cannot be managed via SNMP.
			C-MSS-36110	A	The MSS Management Agent Service shall provide an ECS domain manager agent to coordinate and communicate with multiple ECS management agents.
			C-CSS-63050	A	The CSS Virtual Terminal shall support kerberized version of the telnet protocol for secure authentication of users.
			C-CSS-01000	A	The CSS DOF Service shall provide a standards-based Interface Definition Language (IDL) and language mappings to at least C and C++ (limited) languages.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-CSS-01010	A	The CSS DOF provided IDL shall support versioning of the interface supporting minor and major versions.
			C-CSS-01020	A	The IDL supported minor versioning shall be upward compatible that requires no changes in the client software to communicate with the new implementation.
			C-CSS-01030	A	The CSS DOF Service shall support the passing of the general error status as a parameter in calls between the clients and servers automatically.
			C-CSS-01040	A	The CSS DOF Service shall provide the capability to marshal and unmarshal the arguments and the returned value transparently while making a remote procedure call.
			C-CSS-01050	A	The CSS DOF Service shall provide the capability to marshal and unmarshal standard types to/from a common standard format.
			C-CSS-01060	A	The CSS DOF Service shall provide the capability to define marshaling and unmarshaling routines for user defined types.
			C-CSS-01070	A	The CSS DOF Service shall provide server APIs to register/unregister services in the namespaces (in different administrative domains) under different views (server/group/profile).
			C-CSS-01080	A	The CSS DOF Service shall provide server APIs to register/unregister different implementations of an interface in the namespace.
			C-CSS-01090	A	The CSS DOF Service shall provide server APIs to register/unregister individual objects implementing an interface in the namespace.
			C-CSS-01100	A	The CSS DOF Service shall provide server APIs to register their services using different protocols in the namespace.
			C-CSS-01110	A	The CSS DOF Service shall provide server APIs to register their services with the local endpoint mapper with the proper port number.
			C-CSS-01120	A	The CSS DOF Service shall provide mechanisms to shutdown a service gracefully, by allowing the servers to unregister the server information from the namespace.
			C-CSS-01130	A	The CSS DOF Service shall provide server APIs to limit the maximum number of threads to use in servicing the requests concurrently.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-CSS-01140	A	The CSS DOF Service shall provide client APIs to bind to services (registered in the local namespace as well as remote namespaces) by using any of the following information to achieve location transparency of services. a. a service name b. an interface name c. an object name d. a host name and communication protocol e. an object reference
			C-CSS-01150	A	The CSS DOF Service shall return gracefully by throwing an exception or returning an error code when it can not retrieve the binding information or can not resolve a binding.
			C-CSS-01160	A	The CSS DOF Service shall provide client APIs to specify a confidence level of the binding information as follows: a. a low confidence level indicating the use of a local cache to obtain binding information b. a medium confidence level indicating the DOF to get the binding information from any of the directory replicas. c. a high confidence level indicating the DOF to get the binding information from the master copy of the directory services.
			C-CSS-01170	A	The CSS DOF Service shall provide APIs to set/get the authentication service type to be used between the server and the client.
			C-CSS-01180	A	The CSS DOF Service shall provide APIs to set/get authorization service type to be used between the client and the server.
			C-CSS-01190	A	The CSS DOF Service shall provide APIs to maintain the integrity of the data to be passed between the client and the server.
			C-CSS-01200	A	The CSS DOF Service shall provide APIs to maintain the privacy of the data passed between the client and the server by encrypting and decrypting the data.
			C-CSS-01210	A	The CSS DOF Service shall provide APIs to set the identity of a given principal to a given process.
			C-CSS-01220	A	The CSS DOF shall support the TCP and UDP communication protocols to communicate between the servers and the clients.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-CSS-60530	A	The CSS File Access Service shall support the kerberized version of File Transfer Protocol for secured file transfers.
			C-MSS-18060	A	The Management Data Access Service shall provide the capability for an application to access management data.
			F-FOS-00305	B	The EOC shall interface with the EOS spacecraft and with the EOS instruments in order to perform mission operations, including planning, scheduling, commanding, and monitoring functions.
			C-MSS-16020	IR1	The MSS Monitor/Control Service shall communicate via ECS management protocol with the MSS Management Agent Service to request management data on a managed object.
			C-MSS-16030	IR1	The MSS Monitor/Control Service shall be able to communicate via ECS management protocol with the MSS Management Agent Service to send ECS management set messages to configure and control the processing performed by the ECS management agent.
			C-MSS-16060	IR1	The MSS Monitor/Control Service shall allow the capability to set thresholds on managed resources that are monitored
			C-MSS-36020	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to respond to requests for managed object MIB attributes
			C-MSS-36050	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to receive ECS management set message from the Monitor/Control Service.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-60130	IR1	The MSS Fault Management Application Service shall provide the capability to detect the following types of faults, errors and events: a. communications software version mismatch errors b. communication software configuration errors c. the following errors in communication hardware: 1. host not reachable 2. router not reachable 3. errors and failures of communication links d. Errors in the communications protocols supported e. degradation of performance due to established thresholds being exceeded f. Peripherals g. Databases h. Applications: 1. process missing (Application or COTS product) 2. process in a loop 3. process failed
			C-MSS-36040	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to send ECS management traps/events to the Monitor/Control Service.
			C-CSS-60520	IR1	The CSS File Access Service shall support the File Transfer Protocol (FTP).
			C-MSS-12005	IR1	The MSS Management User Interface (MUI) Service shall be compatible with the ECS management framework.
			C-MSS-14010	IR1	The MSS Maps/Collection Service shall retain the status of managed objects and their relationship to symbols that comprise a graphical representation of the physical network topology.
			C-MSS-20010	IR1	The MSS Discovery Service shall discover (via network protocol) new instances of managed objects.
			C-MSS-16040	IR1	The MSS Monitor/Control Service shall communicate via ECS management protocol with the MSS Management Agent Service to receive ECS management traps/events.
			C-MSS-20030	IR1	The MSS Discovery Service shall report missing occurrences of managed objects.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-16050	IR1	The MSS Monitor/Control Service shall allow customized M&O staff-event notifications and automatic actions.
			C-MSS-16070	IR1	The MSS Monitor/Control Service shall automatically report when a threshold has been exceeded by generating a ECS management event
			C-MSS-36060	IR1	The MSS Management Agent Service shall provide an ECS management agent that is configurable to include: a. Community to respond to and set attributes b. Agent location & contact person c. Traps to send d. Events to log & log file name
			C-MSS-14030	IR1	The MSS Map/Collection Service shall provide a capability to define a hierarchical relationship between maps and sub-maps (i.e., a graphical hierarchical tree)
			C-MSS-14040	IR1	The MSS Map/Collection Service shall propagate events associated with objects up the hierarchical tree
			C-MSS-16005	IR1	The ECS management protocol shall be the SNMP standard as specified in RFC 1157.
			C-MSS-36010	IR1	The MSS Management Agent Service shall retrieve data from ECS managed objects in test or operational mode.
			C-MSS-20020	IR1	The MSS Discovery Service shall detect missing occurrences of managed objects.
			C-MSS-20040	IR1	The MSS Discovery Service shall update the object database after the Discovery Service receives a request to register/unregister a managed object.
			S-INS-60110	A	The ICLHW CI shall support the hardware resource requirements of the INGST CI and its interface requirements with the operations staff.
			S-PLS-60010	A	The PLNHW CI shall support the hardware resource requirements of the PLANG CI and its interface requirements with the operations staff performing planning functions.
			S-PLS-61530	A	The PLNHW CI shall contain the processing, storage, and interface resources to support the planning functions for the TRMM mission instruments of CERES and LIS.
			S-PLS-61610	A	Each PLNHW CI workstation platform shall provide a hard media device with a capacity of TBD GB for software and system maintenance and upgrade support.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DPS-60010	A	The SPRHW CI shall support the capability to manage, queue, and execute processes on the processing resources at each DAAC site.
			S-DPS-60020	A	The SPRHW CI shall support the capability to stage and destage data.
			S-DPS-60050	IR1	The SPRHW CI shall contain and/or provide access to staging (working storage), I/O and processing resources necessary to perform routine processing.
			S-DPS-61040	A	The SPRHW CI computer platform shall provide a hard media device with a capacity of TBD GB for software and system maintenance and upgrade support.
			S-DPS-70010	IR1	The AITHW CI shall provide hardware resources to operations staff for the monitor and control of Science Software Integration and Test (AI&T) on SPRHW CI processing resources.
			S-DPS-80010	A	The AQAHW CI shall provide for hardware resources to support DAAC operations staff performing routine QA of Product data.
			S-DPS-70030	IR1	The AITHW CI shall provide hardware resources to operations staff for the monitor and control of Science Software configuration management.
			C-MSS-36042	A	The MSS management agent service shall send ECS management traps/events to the management server using a reliable notification mechanism.
			C-MSS-36045	A	The MSS management agent service shall send ECS management traps/events to the management server using a secure notification mechanism.
			C-MSS-36052	A	The MSS management agent service shall receive ECS management set messages from the management server using a reliable mechanism.
			C-MSS-36055	A	The MSS management agent service shall receive ECS management set messages from the management server using a secure mechanism.
			C-CSS-01240	B	The CSS DOF Service shall provide a daemon process service that enables secure remote administration of DCE services and enables control of service configuration parameters.
			C-CSS-01260	B	The CSS DOF Service shall provide a hierarchical cell namespace structure.
			C-CSS-01280	B	The CSS Security Service shall provide for a security service ACL manager library.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-CSS-10500	B	The CSS DCCI shall accept virtual terminal service request from the User.
			C-CSS-10520	B	The CSS DCCI shall accept remote file access service request from the User.
			C-CSS-10560	B	The CSS DCCI shall provide remote file access service to the User.
			C-MSS-18360	B	The MSS Management Data Access Service shall provide the capability for the M&O staff to load log files into the management database at the site.
			C-MSS-66001	B	The MSS performance management application service shall be capable of monitoring the performance of the following ECS components a. network components 1. routers 2. links 3. bridges 4. gateways b. hosts c. operating systems d. peripherals e. data f. ECS applications.
			C-MSS-18050	A	The MSS Management Data Access Service's shall utilize CSS Services to access/transfer management data.
			S-DPS-41410	IR1	The AITTL CI shall include access to a problem tracking tool supplied by MSS.
			C-CSS-61050	IR1	The CSS Electronic Mail Service shall be accessible in interactive mode.
			C-CSS-62030	IR1	The CSS Bulletin Board Service shall provide concurrent access to multiple users (registered or non-registered).
			C-CSS-63020	IR1	The CSS Virtual Terminal shall be based on industry standard and accepted protocols (telnet and ktelnet).
			C-MSS-14020	IR1	The MSS Map/Collection Service shall provide a capability to define maps and objects.
			C-MSS-36070	IR1	The MSS Management Agent Service shall provide an ECS management agent for network devices

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-60010	IR1	The MSS Fault Management Application Service shall provide the capability to create and display graphical representations of a given network topology consisting of the following: a. routers b. communication lines c. hosts d. peripherals e. applications
			C-MSS-60110	IR1	The MSS Fault Management Application Service shall be capable of receiving fault notifications.
			C-MSS-60200	IR1	The MSS Fault Management Application Service shall have the capability to generate the following types of notifications for detected faults : a. a change in the color of an icon on a display b. a message in a pop-up notification window c. logging the following fault information to a disk log file: 1. fault type 2. date and time of occurrence of the fault 3. identification of the source of the notification (e.g. IP address, process name, etc.) 4. fault data received with the notification 5. operator-defined descriptive text d. audible alert

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
EOSD0500#Ir1	ECS shall perform the following major functions: d. Communications and Networking e. Data Input f. Data Processing	IR1 shall perform the following major functions: 1. Communications and networking utilizing existing V0 networks. 2. Data input for the purpose of testing TRMM, NESDIS and DAO ingest interfaces. 3. Science software Integration and Test.	C-MSS-60130	IR1	The MSS Fault Management Application Service shall provide the capability to detect the following types of faults, errors and events: a. communications software version mismatch errors b. communication software configuration errors c. the following errors in communication hardware: 1. host not reachable 2. router not reachable 3. errors and failures of communication links d. Errors in the communications protocols supported e. degradation of performance due to established thresholds being exceeded f. Peripherals g. Databases h. Applications: 1. process missing (Application or COTS product) 2. process in a loop 3. process failed
			C-CSS-60520	IR1	The CSS File Access Service shall support the File Transfer Protocol (FTP).
			C-MSS-16040	IR1	The MSS Monitor/Control Service shall communicate via ECS management protocol with the MSS Management Agent Service to receive ECS management traps/events.
			S-DPS-60050	IR1	The SPRHW CI shall contain and/or provide access to staging (working storage), I/O and processing resources necessary to perform routine processing.
			S-DPS-70010	IR1	The AITHW CI shall provide hardware resources to operations staff for the monitor and control of Science Software Integration and Test (AI&T) on SPRHW CI processing resources.
			S-DPS-70030	IR1	The AITHW CI shall provide hardware resources to operations staff for the monitor and control of Science Software configuration management.
			C-CSS-61050	IR1	The CSS Electronic Mail Service shall be accessible in interactive mode.
			C-CSS-63020	IR1	The CSS Virtual Terminal shall be based on industry standard and accepted protocols (telnet and ktelnet).

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-60010	IR1	The MSS Fault Management Application Service shall provide the capability to create and display graphical representations of a given network topology consisting of the following: a. routers b. communication lines c. hosts d. peripherals e. applications
			C-MSS-60110	IR1	The MSS Fault Management Application Service shall be capable of receiving fault notifications.
			C-MSS-60200	IR1	The MSS Fault Management Application Service shall have the capability to generate the following types of notifications for detected faults : a. a change in the color of an icon on a display b. a message in a pop-up notification window c. logging the following fault information to a disk log file: 1. fault type 2. date and time of occurrence of the fault 3. identification of the source of the notification (e.g. IP address, process name, etc.) 4. fault data received with the notification 5. operator-defined descriptive text d. audible alert
EOSD0502#A	ECS shall provide an integrated set of toolkits consisting of software tools for each ECS element.	A: Enhanced PGS toolkits, PI/TL ISTs, IMS	S-PLS-01610	A	The PLANG CI shall be developed with configuration controlled APIs that will be capable of supporting development and integration of new algorithms developed at DAAC to support DAAC value-added production.
			C-CSS-00500	IR1	The CSS client services software shall be made available in the form of a CSS toolkit to the developers.
EOSD0502#B	ECS shall provide an integrated set of toolkits consisting of software tools for each ECS element.	B: Format/Conversion tools. Toolkits applicable to FOS.	S-PLS-01610	A	The PLANG CI shall be developed with configuration controlled APIs that will be capable of supporting development and integration of new algorithms developed at DAAC to support DAAC value-added production.
			F-FOS-00620	B	The FOS shall be capable of growing to support up to 35 IST connected to the EOC network concurrently.
			S-DSS-10230	B	The DDSRV CI shall provide application programming interfaces that support addition of documents for use as Guide data for DAAC-specific Data Products.
			C-CSS-00500	IR1	The CSS client services software shall be made available in the form of a CSS toolkit to the developers.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
EOSD0502#Ir1	ECS shall provide an integrated set of toolkits consisting of software tools for each ECS element.	IR1: This requirement is supported as follows: IR1 shall provide a PGS Toolkit and common CCS communication software.	C-CSS-00500	IR1	The CSS client services software shall be made available in the form of a CSS toolkit to the developers.
EOSD0510#A	ECS shall be capable of being tested during all phases of its development and flight operations.		F-FOS-00335	A	The EOC shall receive TDRSS schedules and User Performance Data (UPD) from the Network Control Center (NCC).
			S-INS-60605	IR1	The ICLHW CI shall support test activities throughout the development phase.
			S-INS-60620	A	Internal testing shall be performed on the ICLHW CI which includes tests of hardware functions, and integration testing with other SDPS subsystems.
			S-INS-60630	A	Internal testing shall be performed on the ICLHW CI to verify the internal interfaces to the Data Management, Client, Data Server, Planning, and Data Processing subsystems.
			S-PLS-61010	A	The PLNHW CI shall support test activities throughout the development phase.
			S-PLS-61020	A	The following testing shall be performed on the PLNHW CI: a. Unit testing b. Subsystem testing c. Integration & Testing d. End-to- End testing
			S-PLS-61040	A	Internal testing shall be performed on the PLNHW CI which includes tests of hardware functions, and integration testing with other SDPS subsystems.
			S-PLS-61050	A	Internal testing shall be performed on the PLNHW CI to verify the internal interfaces to the Data Server, and Ingest subsystems.
			S-DPS-60910	IR1	The SPRHW CI shall support test activities throughout the development phase.
			S-DPS-60920	A	The following testing shall be performed on the SPRHW CI: a. Unit testing b. Subsystem testing c. Integration & Testing d. End-to- End testing
			S-DPS-60930	IR1	The SPRHW CI shall provide test tools as designated in the SDPS Test Tool Matrix.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DPS-60950	A	The SPRHW CI shall be capable of supporting end-to-end test and verification activities of the EOS program including during the pre-launch, spacecraft verification, and instrument verification phases.
			S-DPS-70010	IR1	The AITHW CI shall provide hardware resources to operations staff for the monitor and control of Science Software Integration and Test (AI&T) on SPRHW CI processing resources.
			S-INS-60610	IR1	The following testing shall be performed on the ICLHW CI: a. Unit Testing b. Subsystem testing c. Integration & Testing d. End-to-End testing
EOSD0510#B	ECS shall be capable of being tested during all phases of its development and flight operations.		F-FOS-00335	A	The EOC shall receive TDRSS schedules and User Performance Data (UPD) from the Network Control Center (NCC).
			S-INS-60605	IR1	The ICLHW CI shall support test activities throughout the development phase.
			S-INS-60620	A	Internal testing shall be performed on the ICLHW CI which includes tests of hardware functions, and integration testing with other SDPS subsystems.
			S-INS-60630	A	Internal testing shall be performed on the ICLHW CI to verify the internal interfaces to the Data Management, Client, Data Server, Planning, and Data Processing subsystems.
			S-PLS-61010	A	The PLNHW CI shall support test activities throughout the development phase.
			S-PLS-61040	A	Internal testing shall be performed on the PLNHW CI which includes tests of hardware functions, and integration testing with other SDPS subsystems.
			S-PLS-61050	A	Internal testing shall be performed on the PLNHW CI to verify the internal interfaces to the Data Server, and Ingest subsystems.
			S-DPS-60910	IR1	The SPRHW CI shall support test activities throughout the development phase.
			S-DPS-60920	A	The following testing shall be performed on the SPRHW CI: a. Unit testing b. Subsystem testing c. Integration & Testing d. End-to- End testing

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DPS-60930	IR1	The SPRHW CI shall provide test tools as designated in the SDPS Test Tool Matrix.
			S-DPS-60950	A	The SPRHW CI shall be capable of supporting end-to-end test and verification activities of the EOS program including during the pre-launch, spacecraft verification, and instrument verification phases.
			S-DPS-70010	IR1	The AITHW CI shall provide hardware resources to operations staff for the monitor and control of Science Software Integration and Test (AI&T) on SPRHW CI processing resources.
			S-INS-60610	IR1	The following testing shall be performed on the ICLHW CI: a. Unit Testing b. Subsystem testing c. Integration & Testing d. End-to-End testing
			C-MSS-36800	B	The Management Agent Service shall have the capability to receive from the ASF, statistical and accounting information in ECS's standard API format.
			C-MSS-56010	B	The MSS Mode Management Service shall support a operational mode capability
EOSD0510#Ir1	ECS shall be capable of being tested during all phases of its development .				
EOSD0540#A	ECS elements shall be expandable to facilitate updates in instrument data products and algorithms, particularly with respect to storage capacity and processing capability.		S-DSS-21770	A	The DRPHW CI shall be capable of providing of 200 percent expansion in capacity without architecture or design change.
			S-DSS-01850	A	The Science Data Server shall be capable of supporting 200% growth in the number of Data Requests it accepts and validates without architecture or design change.
			S-DSS-10330	A	The Document Data Server shall be capable of supporting 200% growth in the number of Distribution Requests it accepts and validates without architecture or design change.
			S-DSS-21510	A	The Science Management within the Data Server shall be capable of providing of 200% expansion in capacity without architecture or design change.
			S-DSS-30875	A	The Data Distribution within the Data Server shall be capable of providing 200% expansion in capacity without architecture or design change.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DPS-60135	A	The SPRHW CI design and implementation shall have the flexibility to accommodate Science Processing expansion up to a factor of 3 in its capacity with no changes in its design and up to a factor of 10 without major changes to its design.
EOSD0540#B	ECS elements shall be expandable to facilitate updates in instrument data products and algorithms, particularly with respect to storage capacity and processing capability.		S-DSS-21770	A	The DRPHW CI shall be capable of providing of 200 percent expansion in capacity without architecture or design change.
			S-DSS-01850	A	The Science Data Server shall be capable of supporting 200% growth in the number of Data Requests it accepts and validates without architecture or design change.
			S-DSS-10330	A	The Document Data Server shall be capable of supporting 200% growth in the number of Distribution Requests it accepts and validates without architecture or design change.
			S-DSS-21510	A	The Science Management within the Data Server shall be capable of providing of 200% expansion in capacity without architecture or design change.
			S-DSS-30875	A	The Data Distribution within the Data Server shall be capable of providing 200% expansion in capacity without architecture or design change.
			S-DPS-60135	A	The SPRHW CI design and implementation shall have the flexibility to accommodate Science Processing expansion up to a factor of 3 in its capacity with no changes in its design and up to a factor of 10 without major changes to its design.
EOSD0545#A	ECS shall be able to accommodate growth (e.g., capacity) in all of its functions as well as the addition of new functions.	For compliance refer to Segment Specification 305/DV2, System Design Spec (SDS) 207/SE1.	S-PLS-01600	A	The PLANG CI design and implementation shall have the flexibility to accommodate Planning expansion up to a factor of 3 in its capacity with no changes to its design, and up to a factor of 10 without major changes to its design. Such expansion in capacity or capability shall be transparent to existing algorithms or product specifications.
			S-DPS-20040	A	The PRONG CI design and implementation shall have the flexibility to accomodate Processing expansion up to a factor of 3 in its capacity with no changes to the design, and up to a factor of 10 without major changes to its design. Such expansion in capacity or capability shall be transparent to existing algorithms or product specifications.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DPS-60135	A	The SPRHW CI design and implementation shall have the flexibility to accommodate Science Processing expansion up to a factor of 3 in its capacity with no changes in its design and up to a factor of 10 without major changes to its design.
			S-DPS-70050	A	The Algorithm Integration and Test HWCI design and implementation shall have the flexibility to accommodate Algorithm Integration and Test expansion up to a factor of 3 in its capacity with no changes in its design and up to a factor of 10 without major changes to its design.
			S-PLS-60380	A	The PLNHW CI design and implementation shall have the flexibility to accommodate planning workload expansion up to a factor of 3 in its capacity with no changes in its design and up to a factor of 10 without major changes to its design.
EOSD0545#B	ECS shall be able to accommodate growth (e.g., capacity) in all of its functions as well as the addition of new functions.	For compliance refer to Segment Specification 305/DV2, System Design Spec (SDS) 207/SE1.	C-ISS-06000	A	The ISS network architecture shall enable expansion to GByte networks including the ability to provide increased volume of data distribution/access.
			F-FOS-00620	B	The FOS shall be capable of growing to support up to 35 IST connected to the EOC network concurrently.
EOSD0560#A	ECS benchmark tests and test data sets shall be defined for system verification and data quality evaluation.	Acceptance Test Procedures (411/VE1) will address compliance.			
EOSD0560#B	ECS benchmark tests and test data sets shall be defined for system verification and data quality evaluation.	Acceptance Test Procedures (411/VE1) will address compliance.	F-FOS-00115	B	The EOC shall provide the following to be used in the revalidation of its functional performance: a. Benchmark test(s) b. Standard test data sets.
EOSD0630#A	ECS shall be capable of simultaneously supporting the Independent Verification and Validation (IV&V) activities and ECS development activities, both before and after flight operations begin.		S-DPS-60940	A	The SPRHW CI shall be capable of simultaneously supporting the Independent Verification & Validation (IV&V) activities and the ECS development activities, both before and after flight operations begin.
EOSD0630#B	ECS shall be capable of simultaneously supporting the Independent Verification and Validation (IV&V) activities and ECS development activities, both before and after flight operations begin.		F-FOS-00110	B	The EOC shall be capable of simultaneously supporting the Independent Verification and Validation (IV&V) activities and ECS development activities, both before and after flight operations begin.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DPS-60940	A	The SPRHW CI shall be capable of simultaneously supporting the Independent Verification & Validation (IV&V) activities and the ECS development activities, both before and after flight operations begin.
			C-MSS-56020	B	The MSS Mode Management Service shall support a test mode capability
			C-MSS-56070	B	The MSS Mode Management test mode shall be capable of executing simultaneously with the operational mode
EOSD0700#A	Each ECS element shall provide the following, to be used in the revalidation of its functional performance: a. Benchmark test(s) b. Standard test data sets.	Acceptance Test Procedures (411/VE1) will also address compliance			
EOSD0700#B	Each ECS element shall provide the following, to be used in the revalidation of its functional performance: a. Benchmark test(s) b. Standard test data sets.	Acceptance Test Procedures (411/VE1) will also address compliance.	F-FOS-00115	B	The EOC shall provide the following to be used in the revalidation of its functional performance: a. Benchmark test(s) b. Standard test data sets.
EOSD0710#A	Each ECS element shall provide access to the following items used in the checkout and verification process: a. Stored test data sets b. Stored test plans c. Stored test procedures.				
EOSD0710#B	Each ECS element shall provide access to the following items used in the checkout and verification process: a. Stored test data sets b. Stored test plans c. Stored test procedures.		F-FOS-00120	B	The EOC shall provide access to the following items used in the checkout and verification process: a. Stored test data sets b. Stored test plans c. Stored test procedures.
			S-DSS-04476	A	The DDSRV CI shall provide the ability to store documents and/or data.
EOSD0720#A	Each ECS element shall be able to validate at any time during the life-time of the ECS that the ECS element primary functional performance is consistent with pre-defined operational benchmark tests.				

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
EOSD0720#B	Each ECS element shall be able to validate at any time during the life-time of the ECS that the ECS element primary functional performance is consistent with pre-defined operational benchmark tests.		F-FOS-00125	B	The EOC shall be able to validate at any time during the life-time of the ECS that the EOC primary functional performance is consistent with pre-defined operational benchmark tests.
			F-FOS-00130	B	The EOC shall be capable of verifying the fidelity of the EOC interface to: a. Other ECS components at any time during the lifetime of the ECS b. Entities external to ECS at any time during the lifetime of the ECS
			C-MSS-56020	B	The MSS Mode Management Service shall support a test mode capability
EOSD0730#A	Each ECS element shall be capable of verifying the fidelity of the ECS element interface to: a. Other ECS elements at any time during the lifetime of the ECS b. Entities external to ECS at any time during the lifetime of the ECS		C-MSS-60300	A	The MSS Fault Management Application Service shall provide the capability to identify routes between selected pairs of hosts on the ESN.
			C-MSS-60320	A	The MSS Fault Management Application Service shall provide, for selective use as a debugging aid, the capability to perform packet tracing of protocols used in ECS.
			C-MSS-60330	A	The MSS Fault Management Application Service at each site shall have the capability to perform periodic testing of all ECS communication links at that site to verify that they are operational.
			F-FOS-00130	B	The EOC shall be capable of verifying the fidelity of the EOC interface to: a. Other ECS components at any time during the lifetime of the ECS b. Entities external to ECS at any time during the lifetime of the ECS
			C-MSS-60310	IR1	The MSS Fault Management Application Service shall provide utilities to perform diagnostics and testing of the following for the purpose of fault isolation: a. connectivity between pairs of ECS hosts and ECS routers b. ability to reach hosts and routers c. availability of network services at hosts

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-INS-00520	IR1	The INGST CI shall ingest data, provided by the SDPF, from the ESN into the LaRC DAAC, using a file transfer protocol.
			S-INS-00540	IR1	The INGST CI shall ingest data, provided by the SDPF, from the ESN into the MSFC DAAC using a file transfer protocol.
			S-INS-00560	IR1	The INGST CI shall ingest Data, provided by the TSDIS, from the ESN into the GSFC DAAC using a file transfer protocol.
			S-INS-00570	IR1	The INGST CI shall ingest Data, provided by the TSDIS, from the ESN into the MSFC DAAC using a file transfer protocol.
			S-INS-00620	IR1	The INGST CI shall ingest data, provided by the DAO, from the ESN into the LaRC DAAC using a file transfer protocol.
			S-INS-00630	IR1	The INGST CI shall ingest data, provided by NESDIS, from the ESN into the LaRC DAAC using a file transfer protocol.
			S-INS-00640	IR1	The INGST CI shall ingest data, provided by the DAO, from the ESN into the GSFC DAAC using a file transfer protocol.
			S-DPS-40010	IR1	The AITTL CI shall have the capability to receive a Science Software Delivery from the SCF electronically via the network.
			S-DPS-60920	A	The following testing shall be performed on the SPRHW CI: a. Unit testing b. Subsystem testing c. Integration & Testing d. End-to- End testing
EOSD0730#B	Each ECS element shall be capable of verifying the fidelity of the ECS element interface to: a. Other ECS elements at any time during the lifetime of the ECS b. Entities external to ECS at any time during the lifetime of the ECS		C-MSS-60320	A	The MSS Fault Management Application Service shall provide, for selective use as a debugging aid, the capability to perform packet tracing of protocols used in ECS.
			C-MSS-60330	A	The MSS Fault Management Application Service at each site shall have the capability to perform periodic testing of all ECS communication links at that site to verify that they are operational.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			F-FOS-00130	B	The EOC shall be capable of verifying the fidelity of the EOC interface to: a. Other ECS components at any time during the lifetime of the ECS b. Entities external to ECS at any time during the lifetime of the ECS
			C-MSS-60310	IR1	The MSS Fault Management Application Service shall provide utilities to perform diagnostics and testing of the following for the purpose of fault isolation: a. connectivity between pairs of ECS hosts and ECS routers b. ability to reach hosts and routers c. availability of network services at hosts
			S-INS-00520	IR1	The INGST CI shall ingest data, provided by the SDPF, from the ESN into the LaRC DAAC, using a file transfer protocol.
			S-INS-00540	IR1	The INGST CI shall ingest data, provided by the SDPF, from the ESN into the MSFC DAAC using a file transfer protocol.
			S-INS-00560	IR1	The INGST CI shall ingest Data, provided by the TSDIS, from the ESN into the GSFC DAAC using a file transfer protocol.
			S-INS-00570	IR1	The INGST CI shall ingest Data, provided by the TSDIS, from the ESN into the MSFC DAAC using a file transfer protocol.
			S-INS-00620	IR1	The INGST CI shall ingest data, provided by the DAO, from the ESN into the LaRC DAAC using a file transfer protocol.
			S-INS-00630	IR1	The INGST CI shall ingest data, provided by NESDIS, from the ESN into the LaRC DAAC using a file transfer protocol.
			S-INS-00640	IR1	The INGST CI shall ingest data, provided by the DAO, from the ESN into the GSFC DAAC using a file transfer protocol.
			S-DPS-40010	IR1	The AITTL CI shall have the capability to receive a Science Software Delivery from the SCF electronically via the network.
			S-DPS-60920	A	The following testing shall be performed on the SPRHW CI: a. Unit testing b. Subsystem testing c. Integration & Testing d. End-to- End testing

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-60301	B	The MSS Fault Management Application Service shall provide the capability to identify routes between selected pairs of hosts on the EBnet.
EOSD0730#Ir1	Each ECS element shall be capable of verifying the fidelity of the ECS element interface to: b. Entities external to ECS at any time during the lifetime of the ECS		S-INS-00520	IR1	The INGST CI shall ingest data, provided by the SDPF, from the ESN into the LaRC DAAC, using a file transfer protocol.
			S-INS-00540	IR1	The INGST CI shall ingest data, provided by the SDPF, from the ESN into the MSFC DAAC using a file transfer protocol.
			S-INS-00560	IR1	The INGST CI shall ingest Data, provided by the TSDIS, from the ESN into the GSFC DAAC using a file transfer protocol.
			S-INS-00570	IR1	The INGST CI shall ingest Data, provided by the TSDIS, from the ESN into the MSFC DAAC using a file transfer protocol.
			S-INS-00620	IR1	The INGST CI shall ingest data, provided by the DAO, from the ESN into the LaRC DAAC using a file transfer protocol.
			S-INS-00630	IR1	The INGST CI shall ingest data, provided by NESDIS, from the ESN into the LaRC DAAC using a file transfer protocol.
			S-INS-00640	IR1	The INGST CI shall ingest data, provided by the DAO, from the ESN into the GSFC DAAC using a file transfer protocol.
			S-DPS-40010	IR1	The AITTL CI shall have the capability to receive a Science Software Delivery from the SCF electronically via the network.
EOSD0740#A	Each ECS element shall provide a set of real or simulated functional capabilities for use in the following types of test: a. Subsystem (components of an ECS element) b. Element (fully integrated element) c. ECS System (Integration of ECS elements)		F-FOS-00140	B	The EOC shall provide a set of real or simulated functions which interfaces with both ECS internal and external entities for use in the following types of test: a. FOS Subsystems b. EOC c. ECS System (integration of ECS components) d. EOSDIS System (Integration of EOSDIS components)
			S-DPS-60617	A	The SPRHW CI platforms shall have provision for interfacing with Planning.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DPS-60920	A	The following testing shall be performed on the SPRHW CI: a. Unit testing b. Subsystem testing c. Integration & Testing d. End-to- End testing
EOSD0740#B	Each ECS element shall provide a set of real or simulated functional capabilities for use in the following types of test: a. Subsystem (components of an ECS element) b. Element (fully integrated element) c. ECS System (Integration of ECS elements)		F-FOS-00140	B	The EOC shall provide a set of real or simulated functions which interfaces with both ECS internal and external entities for use in the following types of test: a. FOS Subsystems b. EOC c. ECS System (integration of ECS components) d. EOSDIS System (Integration of EOSDIS components)
			S-DPS-60617	A	The SPRHW CI platforms shall have provision for interfacing with Planning.
			S-DPS-60920	A	The following testing shall be performed on the SPRHW CI: a. Unit testing b. Subsystem testing c. Integration & Testing d. End-to- End testing
EOSD0750#A	Each ECS element shall provide a set of real or simulated functions which interfaces with both its ECS internal and external entities for use in the following types of test: a. Subsystem (components of an ECS element) b. Element (fully integrated element) c. EOSDIS System (Integration of EOSDIS elements)		S-PLS-61150	A	The PLNHW CI shall be capable of being monitored during testing.
			S-DPS-60920	A	The following testing shall be performed on the SPRHW CI: a. Unit testing b. Subsystem testing c. Integration & Testing d. End-to- End testing

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
EOSD0750#B	Each ECS element shall provide a set of real or simulated functions which interfaces with both its ECS internal and external entities for use in the following types of test: a. Subsystem (components of an ECS element) b. Element (fully integrated element) c. EOSDIS System (Integration of EOSDIS elements)		F-FOS-00140	B	The EOC shall provide a set of real or simulated functions which interfaces with both ECS internal and external entities for use in the following types of test: a. FOS Subsystems b. EOC c. ECS System (integration of ECS components) d. EOSDIS System (Integration of EOSDIS components)
			S-INS-60650	IR1	The ICLHW CI shall be capable of being monitored during testing.
			S-PLS-61150	A	The PLNHW CI shall be capable of being monitored during testing.
			S-DPS-60920	A	The following testing shall be performed on the SPRHW CI: a. Unit testing b. Subsystem testing c. Integration & Testing d. End-to- End testing
EOSD0760#A	Each ECS element shall support end-to-end EOS system testing and fault isolation.	A: FULL END-TO-END TEST CAPABILITY FOR TRMM. PARTIAL AM-1 END-TO-END TESTING (NO DIRECT 256 KBPS OR 512 KBPS TELEMETRY TO THE EOC AND FAULT ISOLATION).	S-DPS-60960	A	The SPRHW CI shall support end-to-end EOS system testing and fault isolation.
EOSD0760#B	Each ECS element shall support end-to-end EOS system testing and fault isolation.	B: FULL AM-1 END-TO-END TESTING	F-FOS-00145	B	The EOC shall support end-to-end EOS system testing and fault isolation.
			S-DPS-60960	A	The SPRHW CI shall support end-to-end EOS system testing and fault isolation.
EOSD0780#A	Each ECS element shall be capable of being monitored during testing.		C-MSS-60330	A	The MSS Fault Management Application Service at each site shall have the capability to perform periodic testing of all ECS communication links at that site to verify that they are operational.
			C-MSS-60350	A	The MSS Fault Management Application Service shall have the capability to periodically execute diagnostic tests in order to isolate, characterize and identify a fault.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-INS-60190	IR1	The ICLHW CI shall have a status monitoring capability.
			S-DPS-60910	IR1	The SPRHW CI shall support test activities throughout the development phase.
			S-DPS-60970	IR1	The SPRHW CI shall be capable of being monitored during testing.
			S-DPS-61171	IR1	The SPRHW CI shall have provision for a dynamic analyzer to support the capability to check Science Software source code for memory leaks.
			S-DPS-70070	IR1	The AITHW CI shall have a status monitoring capability.
			C-MSS-66120	IR1	The MSS performance management application service shall be capable of determining the operational state of all network components, hosts, and peripherals to be: a. on-line b. off-line c. in test mode
EOSD0780#B	Each ECS element shall be capable of being monitored during testing.		C-MSS-60330	A	The MSS Fault Management Application Service at each site shall have the capability to perform periodic testing of all ECS communication links at that site to verify that they are operational.
			C-MSS-60350	A	The MSS Fault Management Application Service shall have the capability to periodically execute diagnostic tests in order to isolate, characterize and identify a fault.
			F-FOS-00098	B	The EOC shall provide the capabilities: a. To test both nominal operations and failure paths b. To log test activities and test configuration c. To support analysis of test data and the generation of test results d. To maintain test procedures and test results
			S-INS-60190	IR1	The ICLHW CI shall have a status monitoring capability.
			S-DPS-60910	IR1	The SPRHW CI shall support test activities throughout the development phase.
			S-DPS-60970	IR1	The SPRHW CI shall be capable of being monitored during testing.
			S-DPS-61171	IR1	The SPRHW CI shall have provision for a dynamic analyzer to support the capability to check Science Software source code for memory leaks.
			S-DPS-70070	IR1	The AITHW CI shall have a status monitoring capability.
			C-MSS-56040	B	The MSS Mode Management Service shall have the capability to monitor each independently executing mode for performance statistics.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-56050	B	The MSS Mode Management Service shall provide fault detection and isolation capabilities for each independently executing mode.
			C-MSS-56060	B	The MSS Mode Management Service shall maintain a collection of management statistics for each mode supported.
			C-MSS-66121	B	The MSS performance management application service shall be capable of determining the operational state of all network components, hosts, and peripherals to be: a. on-line b. off-line c. in test mode d. In maintenance, e. in simulation mode.
EOSD0780#Ir1	Each ECS element shall be capable of being monitored during testing.		S-INS-60190	IR1	The ICLHW CI shall have a status monitoring capability.
			S-DPS-60910	IR1	The SPRHW CI shall support test activities throughout the development phase.
			S-DPS-60970	IR1	The SPRHW CI shall be capable of being monitored during testing.
			S-DPS-61171	IR1	The SPRHW CI shall have provision for a dynamic analyzer to support the capability to check Science Software source code for memory leaks.
			S-DPS-70070	IR1	The AITHW CI shall have a status monitoring capability.
			C-MSS-66120	IR1	The MSS performance management application service shall be capable of determining the operational state of all network components, hosts, and peripherals to be: a. on-line b. off-line c. in test mode
EOSD0800#A	Each ECS element shall be capable of supporting end-to-end test and verification activities of the EOS program including during the pre-launch, spacecraft verification, and instrument verification phases.		S-INS-60640	A	Each ICLHW CI element shall be capable of supporting end-to-end test and verification activities of the EOS program including during the pre-launch, spacecraft verification, and instrument verification phases.
			S-PLS-61080	A	The PLNHW CI shall be capable of supporting end-to-end test and verification activities of the EOS program including during the pre-launch, spacecraft verification, and instrument verification phases.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DPS-60920	A	The following testing shall be performed on the SPRHW CI: a. Unit testing b. Subsystem testing c. Integration & Testing d. End-to- End testing
			S-DPS-60950	A	The SPRHW CI shall be capable of supporting end-to-end test and verification activities of the EOS program including during the pre-launch, spacecraft verification, and instrument verification phases.
EOSD0800#B	Each ECS element shall be capable of supporting end-to-end test and verification activities of the EOS program including during the pre-launch, spacecraft verification, and instrument verification phases.		F-FOS-00155	B	The EOC shall be capable of supporting end-to-end test and verification activities of the EOS program including during the pre-launch, spacecraft verification, and instrument verification phases.
			S-INS-60640	A	Each ICLHW CI element shall be capable of supporting end-to-end test and verification activities of the EOS program including during the pre-launch, spacecraft verification, and instrument verification phases.
			S-PLS-61080	A	The PLNHW CI shall be capable of supporting end-to-end test and verification activities of the EOS program including during the pre-launch, spacecraft verification, and instrument verification phases.
			S-DPS-60920	A	The following testing shall be performed on the SPRHW CI: a. Unit testing b. Subsystem testing c. Integration & Testing d. End-to- End testing
			S-DPS-60950	A	The SPRHW CI shall be capable of supporting end-to-end test and verification activities of the EOS program including during the pre-launch, spacecraft verification, and instrument verification phases.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
EOSD1000#A	ECS elements shall contribute a loop delay of not greater than 2.5 seconds of the total system delay of five (5) seconds for emergency real-time commands, not including the time needed for command execution. The loop delay is measured from the originator to the spacecraft/instrument and back and only applies when a Tracking and Data Relay Satellite System (TDRSS) link is available for contact to the spacecraft.		C-HRD-36000	A	The EOC LAN loop delay contribution shall not exceed more than 500 msec (goal 250 msec) seconds of the total ECS delay of 2.5 seconds for emergency real-time commands.
EOSD1000#B	ECS elements shall contribute a loop delay of not greater than 2.5 seconds of the total system delay of five (5) seconds for emergency real-time commands, not including the time needed for command execution. The loop delay is measured from the originator to the spacecraft/instrument and back and only applies when a Tracking and Data Relay Satellite System (TDRSS) link is available for contact to the spacecraft.		F-FOS-00200	B	The ECS shall contribute a loop delay of not greater than 2.5 seconds of the total system delay of six (6) seconds for emergency real-time commands, not including the time needed for command execution.
			C-ISS-02300	B	The ISS-INHW CI EOC LAN loop delay contribution shall not exceed more than 500 msec (goal 250 msec) seconds of the total ECS delay of 2.5 seconds for emergency real-time commands.
EOSD1010#A	ECS shall support daily data volume, processing load, storage volume, instrument support, and data traffic as derivable from and specified in Appendix C and D.	FOS applicability: instrument support only	C-HRD-36010	A	The EOC Operational LAN backbone shall be able to support a peak traffic rate of 24 Mbps to support AM-1 flows from the Ecom interface.
			C-HRD-36030	A	The ISS shall provide sufficient local area network bandwidth at the LaRC DAAC to support data transfer between and among physical nodes provided by SDPS, MSS and CSS in accordance with the Release A network I/O sizing listed in Appendix A of the current version of 304-CD-003.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-HRD-36040	A	The ISS shall provide sufficient local area network bandwidth at the MSFC DAAC to support data transfer between and among physical nodes provided by SDPS, MSS and CSS in accordance with the Release A network I/O sizing listed in Appendix A of the current version of 304-CD-003.
			C-HRD-36050	A	The ISS shall provide sufficient local area network bandwidth at the GSFC DAAC to support data transfer between and among physical nodes provided by SDPS, MSS and CSS in accordance with the Release A network I/O sizing listed in Appendix A of the current version of 304-CD-003.
			C-HRD-36060	A	The ISS shall provide sufficient local area network bandwidth at the EDC DAAC to support data transfer between and among physical nodes provided by SDPS, MSS and CSS in accordance with the Release A network sizing listed in Appendix A of the current version of 304-CD-003.
			S-PLS-60320	A	The PLNHW CI shall support transactions per day, as specified for each release and corresponding DAAC sites in Appendix E, Table E-1 of the current version of 304-CD-002 for Release A and Table E-1 of Appendix E of the current version of 304-CD-005 for Release B.
			S-PLS-60330	A	The PLNHW CI shall provide local storage in support of the DAAC-specific requirements as specified in Appendix E, Table E-9 of the current version of 304-CD-005.
			S-DPS-60240	A	The SPRHW CI shall support a total processing requirement as derived from Table E-1 of Appendix E of the current version of 304-CD-002 for Release A and Appendix E of the current version of 304-CD-005 for Release B.
			S-DPS-60250	A	The SPRHW CI shall be able to support a data volume (GB/Day) as derived from Table E-1 of Appendix E of the current version of 304-CD-002 for Release A and Appendix E of the current version of 304-CD-005 for Release B.
			S-INS-60210	A	The INGST CI shall support a maximum of 300 transactions per day, as specified for each release and corresponding DAAC sites in Table E-3e of the current version of 304-CD-002 for Release A.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
EOSD1010#B	ECS shall support daily data volume, processing load, storage volume, instrument support, and data traffic as derivable from and specified in Appendix C and D.	FOS applicability: instrument support only	C-ISS-02330	B	The ISS-INHW CI shall provide sufficient local area network bandwidth at the LaRC DAAC to support data transfer between and among physical nodes provided by SDPS, MSS and CSS in accordance with the Release B network I/O sizing listed in Appendix A of the current version of 304-CD-005.
			C-ISS-02350	B	The ISS-INHW CI shall provide sufficient local area network bandwidth at the GSFC DAAC to support data transfer between and among physical nodes provided by SDPS, MSS and CSS in accordance with the Release B network I/O sizing listed in Appendix A of the current version of 304-CD-005.
			C-ISS-02360	B	The ISS-INHW CI shall provide sufficient local area network bandwidth at the EDC DAAC to support data transfer between and among physical nodes provided by SDPS, MSS and CSS in accordance with the Release B network sizing listed in Appendix A of the current version of 304-CD-005.
			S-DPS-60242	B	The SPRHW CI processing shall be sized in accordance with processing requirements derived from Appendix E (Section E.2 Table E-2) of the current version of 304-CD-005.
			S-DPS-60251	B	The SPRHW CI storage capacity shall be sized in accordance with the volume requirement derived from Appendix E (Section E.2 Table E-2) of the current version of 304-CD-005.
			S-DPS-60260	B	The SPRHW CI processing shall be sized in accordance with DAO processing requirements derived from Appendix E (Section E.1 Table E-1) of the current version of 304-CD-005.
			S-DPS-60270	B	The SPRHW CI storage capacity shall be sized in accordance with the DAO data volume requirement derived from Appendix E (Section E.1 Table E-1) of the current version of 304-CD-005.
			S-PLS-60320	A	The PLNHW CI shall support transactions per day, as specified for each release and corresponding DAAC sites in Appendix E, Table E-1 of the current version of 304-CD-002 for Release A and Table E-1 of Appendix E of the current version of 304-CD-005 for Release B.
			S-PLS-60330	A	The PLNHW CI shall provide local storage in support of the DAAC-specific requirements as specified in Appendix E, Table E-9 of the current version of 304-CD-005.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DPS-60240	A	The SPRHW CI shall support a total processing requirement as derived from Table E-1 of Appendix E of the current version of 304-CD-002 for Release A and Appendix E of the current version of 304-CD-005 for Release B.
			S-DPS-60250	A	The SPRHW CI shall be able to support a data volume (GB/Day) as derived from Table E-1 of Appendix E of the current version of 304-CD-002 for Release A and Appendix E of the current version of 304-CD-005 for Release B.
			S-INS-60210	A	The INGST CI shall support a maximum of 300 transactions per day, as specified for each release and corresponding DAAC sites in Table E-3e of the current version of 304-CD-002 for Release A.
EOSD1030#A	ECS shall have the capacity to accept a daily average of (2) per cent of the daily data throughput as expedited data for use in mission functions of calibration and anomalies.	For TRMM only	S-DSS-01970		The SDSRV CI shall have the capacity to accept a daily average of two (2) percent of the daily data throughput as expedited data for use in mission functions of calibration and anomalies.
EOSD1030#B	ECS shall have the capacity to accept a daily average of (2) per cent of the daily data throughput as expedited data for use in mission functions of calibration and anomalies.		S-DSS-01970		The SDSRV CI shall have the capacity to accept a daily average of two (2) percent of the daily data throughput as expedited data for use in mission functions of calibration and anomalies.
			S-INS-00083	B	The INGST CI shall determine the data type for expedited data provided by EDOS.
EOSD1040#A	ECS shall provide sufficient capacity to permit the reprocessing of all EOS science data at twice the incoming data rate at a minimum, concurrently with processing of new data.	A: For CERES and LIS on TRMM only.	C-HRD-36070	A	The ISS LANs at the GSFC, MSFC and LaRC DAAC sites shall be capable of supporting twice the R-A network traffic load estimates without redesign.
			C-HRD-36100	A	The EOC Operational LAN shall be able to support peak data rates of up to 48 Mbps without redesign.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DPS-60230	A	The SPRHW CI shall provide a phased capacity to support: a. for pre-launch AI&T at launch minus 2 years: 0.3 X, where X is defined as the at-launch processing estimate b. for pre-launch AI&T and System I&T at-launch minus 1 year: 1.2 X, where X is defined as the at-launch processing estimate c. for post-launch AIT, standard processing, and reprocessing, starting at launch plus 1 year: 2.2 X, where X is defined as the standard processing estimate for that period d. for post-launch AIT, standard processing, and reprocessing, starting at launch plus 2 years: 4.2 X, where X is defined as the standard processing estimate for that period.
			S-DPS-60250	A	The SPRHW CI shall be able to support a data volume (GB/Day) as derived from Table E-1 of Appendix E of the current version of 304-CD-002 for Release A and Appendix E of the current version of 304-CD-005 for Release B.
EOSD1040#B	ECS shall provide sufficient capacity to permit the reprocessing of all EOS science data at twice the incoming data rate at a minimum, concurrently with processing of new data.	B: TRMM & AM-1	S-DPS-60230	A	The SPRHW CI shall provide a phased capacity to support: a. for pre-launch AI&T at launch minus 2 years: 0.3 X, where X is defined as the at-launch processing estimate b. for pre-launch AI&T and System I&T at-launch minus 1 year: 1.2 X, where X is defined as the at-launch processing estimate c. for post-launch AIT, standard processing, and reprocessing, starting at launch plus 1 year: 2.2 X, where X is defined as the standard processing estimate for that period d. for post-launch AIT, standard processing, and reprocessing, starting at launch plus 2 years: 4.2 X, where X is defined as the standard processing estimate for that period.
			C-ISS-02410	B	The ISS-INHW CI EOC Operational LAN shall be able to support peak data rates of up to 48 Mbps without redesign.
			C-MSS-56040	B	The MSS Mode Management Service shall have the capability to monitor each independently executing mode for performance statistics.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DPS-60250	A	The SPRHW CI shall be able to support a data volume (GB/Day) as derived from Table E-1 of Appendix E of the current version of 304-CD-002 for Release A and Appendix E of the current version of 304-CD-005 for Release B.
EOSD1050#A	ECS shall generate and make available to the users Level 1 Standard Products within 24 hours after the availability to ECS of all necessary input data sets.		S-PLS-00010	A	The PLANG CI shall accept Production Requests for specific Data Products with associated time windows that are to be routinely generated.
			S-DPS-60350	A	The SPRHW CI shall generate Level 1 Standard Products within 24 hours after processing is initiated.
EOSD1050#B	ECS shall generate and make available to the users Level 1 Standard Products within 24 hours after the availability to ECS of all necessary input data sets.		S-PLS-00010	A	The PLANG CI shall accept Production Requests for specific Data Products with associated time windows that are to be routinely generated.
			S-DPS-60241	B	The SPRHW CI processing time shall not exceed the overall end-to-end turnaround time of 24 hours minus the processing time of other subsystems involved in instrument product processing.
			S-DPS-60351	B	The SPRHW CI shall contribute to the generation of Level 1 Standard Products within 24 hours after processing is initiated.
EOSD1060#A	ECS shall generate and make available to the users Level 2 Standard Products within 24 hours after the availability to ECS of all necessary Level 1 and other input data sets.		S-PLS-00010	A	The PLANG CI shall accept Production Requests for specific Data Products with associated time windows that are to be routinely generated.
			S-DPS-60360	A	The SPRHW CI shall generate Level 2 Standard Products within 24 hours after processing is initiated.
EOSD1060#B	ECS shall generate and make available to the users Level 2 Standard Products within 24 hours after the availability to ECS of all necessary Level 1 and other input data sets.		S-PLS-00010	A	The PLANG CI shall accept Production Requests for specific Data Products with associated time windows that are to be routinely generated.
			S-DPS-60241	B	The SPRHW CI processing time shall not exceed the overall end-to-end turnaround time of 24 hours minus the processing time of other subsystems involved in instrument product processing.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DPS-60361	B	The SPRHW CI shall contribute to the generation of Level 2 Standard Products within 24 hours after processing is initiated.
EOSD1070#A	ECS shall generate and make available to the users Level 3 Standard Products within 24 hours after the availability to ECS of all necessary Level 2 and other input data sets.		S-PLS-00010	A	The PLANG CI shall accept Production Requests for specific Data Products with associated time windows that are to be routinely generated.
			S-DPS-60370	A	The SPRHW CI shall generate Level 3 Standard Products within 24 hours after processing is initiated.
EOSD1070#B	ECS shall generate and make available to the users Level 3 Standard Products within 24 hours after the availability to ECS of all necessary Level 2 and other input data sets.		S-PLS-00010	A	The PLANG CI shall accept Production Requests for specific Data Products with associated time windows that are to be routinely generated.
			S-DPS-60241	B	The SPRHW CI processing time shall not exceed the overall end-to-end turnaround time of 24 hours minus the processing time of other subsystems involved in instrument product processing.
			S-DPS-60371	B	The SPRHW CI shall contribute to the generation of Level 3 Standard Products within 24 hours after processing is initiated.
EOSD1080#A	ECS shall generate and make available to the users Level 4 Standard Products within one week after the availability to ECS of all necessary Level 3 and other input data sets.		S-PLS-00010	A	The PLANG CI shall accept Production Requests for specific Data Products with associated time windows that are to be routinely generated.
			S-DPS-60380	A	The SPRHW CI shall generate and make available to the users Level 4 Standard Products within one week after the availability to ECS of all necessary Level 3 and other input data sets.
EOSD1080#B	ECS shall generate and make available to the users Level 4 Standard Products within one week after the availability to ECS of all necessary Level 3 and other input data sets.		S-PLS-00010	A	The PLANG CI shall accept Production Requests for specific Data Products with associated time windows that are to be routinely generated.
			S-DPS-60380	A	The SPRHW CI shall generate and make available to the users Level 4 Standard Products within one week after the availability to ECS of all necessary Level 3 and other input data sets.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
EOSD1085#B	ECS shall be capable of ingesting and archiving Landsat7 Level OR data produced by LPS over 12 hours, (see Appendix C) within 8 hours from the time of receipt of the data availability notice from LPS.		S-INS-61030	B	The ICLHW CI at the EDC DAAC shall be capable of ingesting data from the Landsat 7 Processing System (LPS) at the nominal rate specified in Appendix E (Section E.1, Table E-1, Section E.2 Table E-2, and Section E.3 Tables E-3a and E-3b) of the current version of 304-CD-005.
			S-INS-60770	B	The ICLHW CI at the EDC DAAC shall be sized to temporarily store the volume of Landsat 7 data as specified in Appendix E (Section E.1 Table E-1, Section E.2 Table E-2, and Section E.3 Tables E-3a and E-3b) of the current version of 304-CD-005.
			S-INS-60733	B	The ICLHW CI shall contain the storage and interface resources to support the ingest functions for the Landsat 7 Processing System interface at EDC.
EOSD1140#A	ECS shall allocate 10% of development resources (the ECS Sustaining Engineering Facility at GSFC), including processing, storage, and networks, for the IV&V activity.		C-MSS-00200	A	The MSS services shall allocate 10% of development resources for IV&V activity.
			C-CSS-00200	A	The CSS services shall allocate 10% of development resources for IV&V activity.
EOSD1140#B	ECS shall allocate 10% of development resources (the ECS Sustaining Engineering Facility at GSFC), including processing, storage, and networks, for the IV&V activity.		C-MSS-00200	A	The MSS services shall allocate 10% of development resources for IV&V activity.
			C-CSS-00200	A	The CSS services shall allocate 10% of development resources for IV&V activity.
EOSD1480#A	ECS shall receive from the resident EOS Project Scientist the IWGs Long Term Science Plan (LTSP) and updates as required.		F-PAS-00010	A	The EOC shall obtain the Long Term Science Plan (LTSP) from the ECS SMC element.
EOSD1480#B	ECS shall receive from the resident EOS Project Scientist the IWGs Long Term Science Plan (LTSP) and updates as required.		F-FOS-00300	B	The EOC shall interface with the EOS Project Scientist for resolution of conflicts between instrument activities of equal priority.
			F-PAS-00010	A	The EOC shall obtain the Long Term Science Plan (LTSP) from the ECS SMC element.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-00500	B	The MSS shall have the capability to send EOS Long Term Science Plans to ASTER GDS.
EOSD1490#B	ECS elements shall interface with the resident EOS Project Scientist for resolution of conflicts between observations of equal priority.				
EOSD1500#B	ECS shall interface with the EOS spacecraft and with the EOS instruments in order to perform mission operations, including planning, scheduling, commanding, and monitoring functions.		F-FOS-00305	B	The EOC shall interface with the EOS spacecraft and with the EOS instruments in order to perform mission operations, including planning, scheduling, commanding, and monitoring functions.
EOSD1502#A	ECS elements shall use Ecom for data communications for the following types of data: a. Production data sets (Level 0 data) b. Expedited data sets c. Real-time data (for health and safety) d. Command data e. Data requested from back-up archive f. TDRSS schedule requests g. Data exchange with the FDF	A: to support AM-1 testing. A: Note that data exchange with FDF is SOW requirements!! A: CONCERN HERE IS EXPECTED READINESS OF FDF FOR RELEASE A I/F TESTING. NOTE THAT FOR RELEASE A N/A IF FDF IS NOT READY, BUT EOC FUNCTIONALITY SHOULD BE THERE TO ACCOMODATE IT!	C-MSS-10010	A	The MSS shall interface with the Ecom systems to exchange data identified in Table 5.1-1 as specified in the ECS/Ecom IRD.
			C-MSS-10040	A	The MSS shall interface with the NASA Institutional Support System (NISS) to exchange data identified in Table 5.1-1 as specified in ECS/NISS IRD, 194-219-SE1-020.
EOSD1502#B	ECS elements shall use Ecom for data communications for the following types of data: a. Production data sets (Level 0 data) b. Expedited data sets c. Real-time data (for health and safety) d. Command data e. Data requested from back-up archive f. TDRSS schedule requests g. Data exchange with the FDF	B: To support AM-1 operations. ECOM COMMUNICATIONS BETWEEN THE GSFC DAAC AND FDF	F-FOS-00320	B	The EOC shall use Ecom for data communications for the following types of data: a. Real-time telemetry data, rate-buffered telemetry data b. Command data c. TDRSS schedule requests and TDRSS schedules d. Data exchange with the FDF, NCC and EDOS

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
EOSD1505#A	ECS elements shall receive EOS spacecraft predicted orbit data and post pass ephemeris determination data from the FDF.		F-PAS-00140	A	The FOS shall provide the capability to notify the user when he attempts to schedule an activity beyond the limit of the predicted orbit data provided by the FDF.
			F-PAS-00145	A	The FOS shall provide the capability for an authorized user to receive updated spacecraft orbit data from the FDF.
			F-PAS-00150	A	The FOS shall provide the capability for an authorized user to incorporate updated orbit data from the FDF into the mission schedule for a specific spacecraft.
			F-PAS-00155	A	The FOS shall provide FDF orbit data to the ECS SDPS.
			F-FUI-04060	A	The FOS shall provide the capability to display orbital events on the timeline display.
EOSD1505#B	ECS elements shall receive EOS spacecraft predicted orbit data and post pass ephemeris determination data from the FDF.		F-FOS-00325	B	The EOC shall receive EOS planning aids from the FDF.
			F-PAS-00140	A	The FOS shall provide the capability to notify the user when he attempts to schedule an activity beyond the limit of the predicted orbit data provided by the FDF.
			F-PAS-00145	A	The FOS shall provide the capability for an authorized user to receive updated spacecraft orbit data from the FDF.
			F-PAS-00150	A	The FOS shall provide the capability for an authorized user to incorporate updated orbit data from the FDF into the mission schedule for a specific spacecraft.
			F-PAS-00155	A	The FOS shall provide FDF orbit data to the ECS SDPS.
			F-PAS-01125	B	The FOS shall provide the capability for an authorized user to include orbital events as mission events.
			F-PAS-01130	B	The FOS shall provide the capability for an authorized user to generate (TBR) orbital events that are not provided by the FDF.
			F-FUI-04060	A	The FOS shall provide the capability to display orbital events on the timeline display.
			F-FUI-04280	B	The FOS shall provide the capability to display the limit of orbit data from the FDF on the timeline.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
EOSD1510#B	ECS elements shall provide the FDF with subsets of spacecraft housekeeping data related to the on-board attitude and orbit systems.	B: FOR THE ASTER GDS INTERFACE	F-FOS-00330	B	The EOC shall provide the FDF with subsets of spacecraft housekeeping data.
EOSD1520#A	ECS elements shall receive TDRSS schedules from the Network Control Center (NCC).		F-FOS-00335	A	The EOC shall receive TDRSS schedules and User Performance Data (UPD) from the Network Control Center (NCC).
			F-PAS-00700	A	The FOS shall provide the capability for an authorized user to plan spacecraft communication contacts.
			F-FUI-04010	A	The FOS shall provide the capability to display TDRSS availability for a specified time period on a timeline display.
			F-PAS-10405	A	The EOC shall provide the capability to receive TDRSS contact times from the NCC.
EOSD1520#B	ECS elements shall receive TDRSS schedules from the Network Control Center (NCC).		F-FOS-00335	A	The EOC shall receive TDRSS schedules and User Performance Data (UPD) from the Network Control Center (NCC).
			F-PAS-00700	A	The FOS shall provide the capability for an authorized user to plan spacecraft communication contacts.
			F-FUI-04010	A	The FOS shall provide the capability to display TDRSS availability for a specified time period on a timeline display.
			F-PAS-10405	A	The EOC shall provide the capability to receive TDRSS contact times from the NCC.
EOSD1530#A	ECS elements shall submit TDRSS schedule requests to the NCC.		F-FOS-00340	A	The EOC elements shall submit TDRSS schedule requests and Ground Configuration Message Requests to the NCC.
			F-PAS-00700	A	The FOS shall provide the capability for an authorized user to plan spacecraft communication contacts.
			F-FUI-04010	A	The FOS shall provide the capability to display TDRSS availability for a specified time period on a timeline display.
			F-PAS-10400	A	The EOC shall provide the capability to schedule communication contacts with TDRSS through the NCC.
EOSD1530#B	ECS elements shall submit TDRSS schedule requests to the NCC.		F-FOS-00340	A	The EOC elements shall submit TDRSS schedule requests and Ground Configuration Message Requests to the NCC.
			F-PAS-00700	A	The FOS shall provide the capability for an authorized user to plan spacecraft communication contacts.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			F-FUI-04010	A	The FOS shall provide the capability to display TDRSS availability for a specified time period on a timeline display.
			F-PAS-10400	A	The EOC shall provide the capability to schedule communication contacts with TDRSS through the NCC.
EOSD1600#A	The ECS elements that interface with EDOS elements shall exchange element level status data with EDOS.	A: FOR STATUS EXCHANGES BETWEEN EOC AND EDOS CODAS AND TSS SUMMARY REPORTS FROM EDOS; ONLY THE GSFC AND LARC DAACS WILL INTERFACE WITH EDOS.	C-MSS-10100	A	The MSS shall interface with the EDOS to exchange data identified in Table 5.1-1 as specified in EDOS/EGS IRD, 560-EDOS-0211.
EOSD1600#B	The ECS elements that interface with EDOS elements shall exchange element level status data with EDOS.	B: OTHER EDOS/EOC STATUS (AS APPLICABLE). STATUS EXCHANGES BETWEEN GSFC + LARC DAACS & EDOS; ONLY THE GSFC AND LARC DAACS WILL INTERFACE WITH EDOS.	F-FOS-00345	B	The EOC shall receive status data from EDOS.
EOSD1605#A	ECS elements shall receive from EDOS telemetry data, including housekeeping, engineering, ancillary, and science data from EOS instruments and spacecraft.		F-FOS-00350	A	The EOC shall receive telemetry data from EDOS, including real-time and rate-buffered housekeeping and engineering data from EOS instruments and spacecraft.
EOSD1605#B	ECS elements shall receive from EDOS telemetry data, including housekeeping, engineering, ancillary, and science data from EOS instruments and spacecraft.		F-FOS-00350	A	The EOC shall receive telemetry data from EDOS, including real-time and rate-buffered housekeeping and engineering data from EOS instruments and spacecraft.
EOSD1607#A	ECS shall receive data from near term Earth Probe missions to include the following as a minimum: a). TRMM data for archive and distribution b). Landsat 7 data for archive and distribution including IGS metadata and browse.		C-CSS-60520	IR1	The CSS File Access Service shall support the File Transfer Protocol (FTP).
			S-INS-00520	IR1	The INGST CI shall ingest data, provided by the SDPF, from the ESN into the LaRC DAAC, using a file transfer protocol.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-INS-00530	A	The INGST CI shall ingest data, provided by the SDPF, from physical media into the LaRC DAAC as a backup transfer mechanism.
			S-INS-00540	IR1	The INGST CI shall ingest data, provided by the SDPF, from the ESN into the MSFC DAAC using a file transfer protocol.
			S-INS-00550	A	The INGST CI shall ingest data, provided by the SDPF, from physical media into the MSFC DAAC as a backup transfer mechanism.
			S-INS-00560	IR1	The INGST CI shall ingest Data, provided by the TSDIS, from the ESN into the GSFC DAAC using a file transfer protocol.
			S-INS-00570	IR1	The INGST CI shall ingest Data, provided by the TSDIS, from the ESN into the MSFC DAAC using a file transfer protocol.
			S-INS-00780	A	The INGST CI shall ingest data, provided by the Landsat 7 Processing Facility (LPS), from the ESN into the EDC DAAC using a file transfer protocol.
EOSD1607#B	ECS shall receive data from near term Earth Probe missions to include the following as a minimum: a). TRMM data for archive and distribution b). Landsat 7 data for archive and distribution including IGS metadata and browse.		C-CSS-60520	IR1	The CSS File Access Service shall support the File Transfer Protocol (FTP).
			S-INS-00520	IR1	The INGST CI shall ingest data, provided by the SDPF, from the ESN into the LaRC DAAC, using a file transfer protocol.
			S-INS-00530	A	The INGST CI shall ingest data, provided by the SDPF, from physical media into the LaRC DAAC as a backup transfer mechanism.
			S-INS-00540	IR1	The INGST CI shall ingest data, provided by the SDPF, from the ESN into the MSFC DAAC using a file transfer protocol.
			S-INS-00550	A	The INGST CI shall ingest data, provided by the SDPF, from physical media into the MSFC DAAC as a backup transfer mechanism.
			S-INS-00560	IR1	The INGST CI shall ingest Data, provided by the TSDIS, from the ESN into the GSFC DAAC using a file transfer protocol.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-INS-00570	IR1	The INGST CI shall ingest Data, provided by the TSDIS, from the ESN into the MSFC DAAC using a file transfer protocol.
			S-INS-00780	A	The INGST CI shall ingest data, provided by the Landsat 7 Processing Facility (LPS), from the ESN into the EDC DAAC using a file transfer protocol.
			S-INS-00785	B	The INGST CI shall ingest Data, provided by the Landsat 7 Image Assessment System (IAS), from the LAN into the EDC DAAC using a file transfer protocol.
			S-INS-00787	B	The INGST CI shall ingest Data, provided by the Landsat 7 International Ground Stations (IGSs), into the EDC DAAC on 8 mm cartridge tape.
EOSD1607#Ir1	ECS shall receive data from near term Earth Probe missions to include the following as a minimum: a). TRMM data for temporary storage for testing purposes only.	IR1: Applies only to ingest and temporary storage for testing purposes only (not aarchiving) of TRMM data.	C-CSS-60520	IR1	The CSS File Access Service shall support the File Transfer Protocol (FTP).
			S-INS-00520	IR1	The INGST CI shall ingest data, provided by the SDPF, from the ESN into the LaRC DAAC, using a file transfer protocol.
			S-INS-00540	IR1	The INGST CI shall ingest data, provided by the SDPF, from the ESN into the MSFC DAAC using a file transfer protocol.
			S-INS-00560	IR1	The INGST CI shall ingest Data, provided by the TSDIS, from the ESN into the GSFC DAAC using a file transfer protocol.
			S-INS-00570	IR1	The INGST CI shall ingest Data, provided by the TSDIS, from the ESN into the MSFC DAAC using a file transfer protocol.
EOSD1608#A	ECS elements shall receive from EPDSs the following at a minimum: a. Data products b. Ancillary data c. Calibration data d. Correlative data e. Metadata f. Data information g. Documentation		S-INS-00520	IR1	The INGST CI shall ingest data, provided by the SDPF, from the ESN into the LaRC DAAC, using a file transfer protocol.
			S-INS-00530	A	The INGST CI shall ingest data, provided by the SDPF, from physical media into the LaRC DAAC as a backup transfer mechanism.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-INS-00540	IR1	The INGST CI shall ingest data, provided by the SDPF, from the ESN into the MSFC DAAC using a file transfer protocol.
			S-INS-00550	A	The INGST CI shall ingest data, provided by the SDPF, from physical media into the MSFC DAAC as a backup transfer mechanism.
			S-INS-00560	IR1	The INGST CI shall ingest Data, provided by the TSDIS, from the ESN into the GSFC DAAC using a file transfer protocol.
			S-INS-00570	IR1	The INGST CI shall ingest Data, provided by the TSDIS, from the ESN into the MSFC DAAC using a file transfer protocol.
			S-INS-00780	A	The INGST CI shall ingest data, provided by the Landsat 7 Processing Facility (LPS), from the ESN into the EDC DAAC using a file transfer protocol.
EOSD1608#B	ECS elements shall receive from EPDSs the following at a minimum: a. Data products b. Ancillary data c. Calibration data d. Correlative data e. Metadata f. Data information g. Documentation		S-INS-00520	IR1	The INGST CI shall ingest data, provided by the SDPF, from the ESN into the LaRC DAAC, using a file transfer protocol.
			S-INS-00530	A	The INGST CI shall ingest data, provided by the SDPF, from physical media into the LaRC DAAC as a backup transfer mechanism.
			S-INS-00540	IR1	The INGST CI shall ingest data, provided by the SDPF, from the ESN into the MSFC DAAC using a file transfer protocol.
			S-INS-00550	A	The INGST CI shall ingest data, provided by the SDPF, from physical media into the MSFC DAAC as a backup transfer mechanism.
			S-INS-00560	IR1	The INGST CI shall ingest Data, provided by the TSDIS, from the ESN into the GSFC DAAC using a file transfer protocol.
			S-INS-00570	IR1	The INGST CI shall ingest Data, provided by the TSDIS, from the ESN into the MSFC DAAC using a file transfer protocol.
			S-INS-00780	A	The INGST CI shall ingest data, provided by the Landsat 7 Processing Facility (LPS), from the ESN into the EDC DAAC using a file transfer protocol.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-INS-00785	B	The INGST CI shall ingest Data, provided by the Landsat 7 Image Assessment System (IAS), from the LAN into the EDC DAAC using a file transfer protocol.
			S-INS-00787	B	The INGST CI shall ingest Data, provided by the Landsat 7 International Ground Stations (IGSs), into the EDC DAAC on 8 mm cartridge tape.
EOSD1608#Ir1	ECS elements shall receive from EPDSs the following at a minimum: a. Data products e. Metadata		S-INS-00520	IR1	The INGST CI shall ingest data, provided by the SDPF, from the ESN into the LaRC DAAC, using a file transfer protocol.
			S-INS-00540	IR1	The INGST CI shall ingest data, provided by the SDPF, from the ESN into the MSFC DAAC using a file transfer protocol.
			S-INS-00560	IR1	The INGST CI shall ingest Data, provided by the TSDIS, from the ESN into the GSFC DAAC using a file transfer protocol.
			S-INS-00570	IR1	The INGST CI shall ingest Data, provided by the TSDIS, from the ESN into the MSFC DAAC using a file transfer protocol.
EOSD1680#A	ECS elements shall receive simulated spacecraft and instrument telemetry from the EOS spacecraft simulators and shall receive flight software loads from the Software and Validation Facility (SDVF)		F-FOS-00347	A	The EOC shall send command data to EDOS for subsequent uplink to the EOS spacecraft.
			F-TLM-00115	A	The EOC shall be capable of receiving EOS spacecraft simulator telemetry.
EOSD1680#B	ECS elements shall receive simulated spacecraft and instrument telemetry from the EOS spacecraft simulators and shall receive flight software loads from the Software and Validation Facility (SDVF)		F-FOS-00310	B	The EOC shall receive simulated spacecraft and instrument telemetry from the EOS spacecraft simulators.
			F-FOS-00347	A	The EOC shall send command data to EDOS for subsequent uplink to the EOS spacecraft.
			F-TLM-00115	A	The EOC shall be capable of receiving EOS spacecraft simulator telemetry.
EOSD1690#A	ECS elements shall provide commands to the EOS spacecraft simulators.		F-CMD-01165	A	The EOC shall be capable of transmitting commands to the spacecraft simulator.
			F-PAS-10300	A	The EOC shall receive a list of ASTER activities from the ASTER ICC as specified in the ASTER ICC ICD.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			F-PAS-10100	A	The FOS shall be able to receive DAR observation numbers.
			F-PAS-10615	A	The FOS shall provide predicted orbital information to the ASTER ICC.
			F-PAS-10305	B	The EOC shall provide the AM-1 mission schedule to the ASTER ICC as specified in the ASTER ICC ICD.
EOSD1690#B	ECS elements shall provide commands to the EOS spacecraft simulators.		F-FOS-00315	B	The EOC shall provide commands to the EOS spacecraft simulators.
			F-FOS-00317	B	The EOC shall receive flight software loads from the Software Development and Validation Facility (SDVF).
			F-FOS-00318	B	The EOC shall send flight software dumps to the Software Development and Validation Facility (SDVF).
			F-CMD-01165	A	The EOC shall be capable of transmitting commands to the spacecraft simulator.
			F-PAS-10300	A	The EOC shall receive a list of ASTER activities from the ASTER ICC as specified in the ASTER ICC ICD.
			F-PAS-10100	A	The FOS shall be able to receive DAR observation numbers.
			F-PAS-10615	A	The FOS shall provide predicted orbital information to the ASTER ICC.
			F-PAS-10305	B	The EOC shall provide the AM-1 mission schedule to the ASTER ICC as specified in the ASTER ICC ICD.
EOSD1695#A	The ECS shall provide 2-way interoperability with the V0 system.		C-CSS-10100	A	The CSS shall interface with the SDPS subsystems to exchange the data items in Table 6-1 as specified in the ECS internal ICDs, 313-DV3-003.
			C-ISS-01090	A	The ISS shall provide for local or metro area connectivity between V0 network nodes and V1 network nodes at GSFC, LaRC and MSFC DAAC sites in order to provide interoperability between the systems.
			C-ISS-01080	IR1	The ISS shall reuse the V0 WAN in order to provide connectivity between V0 network nodes and V1 network nodes and to provide interoperability between the systems.
			C-MSS-10020	A	The MSS shall interface with the Version 0 system to exchange data identified in Table 5.1-1 as specified in the ECS/V0 IRD, 194-219-SE1-004.
EOSD1695#B	The ECS shall provide 2-way interoperability with the V0 system.		C-CSS-10100	A	The CSS shall interface with the SDPS subsystems to exchange the data items in Table 6-1 as specified in the ECS internal ICDs, 313-DV3-003.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-ISS-11090	B	The ISS shall provide for local or metro area connectivity to V0 network nodes at the GSFC, LaRC, MSFC, JPL, ASF, and NSIDC DAAC sites in order to provide interoperability between ECS and V0.
EOSD1703#A	ECS shall provide maintenance and operations interfaces to the DAACs to support the functions of: a). System Management b). Science Algorithm Integration c). Product Generation d). Data Archive/Distribution e). User Support Services f). System Maintenance	A: GSFC, MSFC, LaRC DAACs. Users Services is provided through the same interfaces available to the users community which included the VO Client for Release A. For the EDC DAACs, only item b. of req. text applicable.	C-MSS-60030	A	The MSS Fault Management Application Service shall provide the capability to assign faults to categories.
			C-MSS-60040	A	The MSS Fault Management Application Service shall provide the capability to assign severity levels to faults.
			C-MSS-60050	A	The MSS Fault Management Application Service shall be capable of providing the Management Data Access Service with a configurable list of fault categories that specify whether to enable or disable the logging of fault notifications for that fault category.
			C-MSS-60060	A	The MSS Fault Management Application Service shall provide the capability to enable or disable the display of fault notifications received from a specific managed object based on fault category assigned to that fault.
			C-MSS-60070	A	The MSS Fault Management Application Service shall provide the capability to specify additional information to be added to a disk log file, based on the fault category, when the notification of a fault is received.
			C-MSS-76040	A	The MSS Accountability Management Service shall be capable of reporting audit information to M&O staff via the MUI service.
			C-MSS-69030	A	The MSS performance management application service shall be capable of providing results of benchmark tests and results of predefined tests to the M&O staff for validation.
			C-MSS-70510	A	The MSS site Security Management Application Service shall, upon the detection of a compromise, isolate the compromised input I/O, and the compromised area's output I/O until the compromise has been eliminated.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-36080	A	The MSS Management Agent Service shall provide an extensible ECS management agent for ECS Host systems
			C-MSS-36090	A	The MSS Management Agent Service shall provide an extensible ECS management agent for ECS applications
			C-MSS-36100	A	The MSS Management Agent Service shall provide proxy agents for ECS network devices and applications that cannot be managed via SNMP.
			C-MSS-36110	A	The MSS Management Agent Service shall provide an ECS domain manager agent to coordinate and communicate with multiple ECS management agents.
			C-HRD-11100	A	The Enterprise Monitoring Server processor shall include a dedicated terminal to be used as a local systems operations console.
			C-HRD-11120	A	The Enterprise Monitoring Server processor terminal shall be compatible with the Management Workstation display device.
			C-HRD-11310	A	The Enterprise Monitoring Server data storage shall be compatible with the Local System Management Server short-term data storage.
			C-HRD-12120	A	The Local Management Server processor terminal shall be compatible with the Management Workstation display device.
			C-HRD-11335	A	The Enterprise Monitoring Server data storage shall be capable of archiving data to the ECS data server archive for data archive.
			C-HRD-12345	A	The Local Management Server data archive shall adhere to ECS Data Server archival requirements for data storage and retrieval.
			C-HRD-11345	A	The Enterprise Monitoring Server data archive shall adhere to ECS data server archival requirements for data storage and retrieval.
			C-HRD-11505	A	The Enterprise Monitoring Server peripheral disk drives shall be capable of retrieving data stored from both the enterprise monitoring server data storage and data archive.
			C-HRD-11530	A	The Enterprise Monitoring Server peripherals shall support at least one tape drive.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-HRD-11535	A	The Enterprise Monitoring Server peripheral tape drive shall have the following characteristics: a. 4mm Digital Audio Tape format b. Accept industry standard magnetic 4mm DAT (i.e. DDS-90) c. Data transfer rate of 200KB/sec
			C-HRD-12100	A	The Local Management Server processor shall include a dedicated terminal to be used as a local systems operations console.
			C-HRD-12335	A	The Local Management Server data storage shall be capable of archiving data to the ECS Data Server archive for data archive.
			C-HRD-21120	A	The Enterprise Communications Server processor terminal shall be compatible with the Management Workstation display device.
			C-HRD-12535	A	The Local Management Server peripheral tape drive shall have the following characteristics: a. 4mm Digital Audio Tape format b. Accept industry standard magnetic 4mm DAT (i.e. DDS-90) c. Data transfer rate of 200KB/sec
			C-HRD-13100	A	At a minimum, each processor shall have the capability to support a POSIX compliant IEEE 1003.1 operating system (UNIX).
			C-HRD-13105	A	Each Management Workstation shall provide one QWERTY keyboard which shall: a. Be detachable and cabled for movement on a desk-top style workstation area b. Provide a minimum of 12 programmable function keys

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-HRD-13110	A	Each Management Workstation shall provide one color text and graphics display device which shall: a. Display the complete ASCII character set b. Provide a minimum of 1024 pixel x 864 lines resolution display c. Display a minimum of 16 colors d. Display pages 24 lines by 80 characters wide e. Display a minimum of four screen display pages f. Display pages readable from any location along the width of the workstation and up to a distance of 6 feet from the screen g. Provide a minimum of 19 inches diagonal non-glare screen h. Provide RGB video output for hard copy i. Feature an integral swivel/tilt base j. Provide brightness, contrast and power controls within easy reach. k. Be physically relocatable within the operations center
			C-HRD-13115	A	The Management Workstation shall provide one cursor pointing device (mouse).
			C-HRD-13120	A	The Management Workstation shall be upgradeable/replaceable within the same product family.
			C-HRD-22120	A	The Local Communications Server processor terminal shall be compatible with the Management Workstation display device.
			C-HRD-21100	A	The Enterprise Communications Server processor shall include a dedicated terminal to be used as a local systems operations console.
			C-HRD-22345	A	The Local Communications Server data archive shall adhere to ECS Data Server archival requirements for data storage and retrieval.
			C-HRD-21310	A	The Enterprise Communications Server data storage shall be compatible with the Communications Server short-term data storage.
			C-HRD-21320	A	The Enterprise Communications Server data storage shall have the following hot swappable components: a. Disks b. Power Supplies c. Fans d. Disk-array controllers

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-HRD-23120	A	The Bulletin Board Server processor terminal shall be compatible with the Management Workstation display device.
			C-HRD-21335	A	The Enterprise Communications Server data storage shall be capable of archiving data to the ECS Data Server archive for data archive.
			C-HRD-21345	A	The Enterprise Communications Server data archive shall adhere to ECS data server archival requirements for data storage and retrieval.
			C-HRD-21505	A	The Enterprise Communications Server peripheral disk drives shall be capable of retrieving data stored from both the Enterprise Communications server data storage and data archive.
			C-HRD-21530	A	The Enterprise Communications Server peripherals shall support at least one tape drive.
			C-HRD-21535	A	The Enterprise Communications Server peripheral tape drive shall have the following characteristics: a. 4mm Digital Audio Tape format b. Accept industry standard magnetic 4mm DAT (i.e. DDS-90) c. Data transfer rate of 200KB/sec
			C-HRD-22100	A	The Local Communications Server processor shall include a dedicated terminal to be used as a local systems operations console.
			C-HRD-22335	A	The Local Communications Server data storage shall be capable of archiving data to the ECS Data Server archive.
			C-HRD-22505	A	The Local Communications Server peripheral disk drives shall be capable of retrieving data stored from both the Local Communications server data storage and data archive.
			C-HRD-22530	A	The Local Communications Server peripherals shall support at least one tape drive.
			C-HRD-22535	A	The Local Communications Server peripheral tape drive shall have the following characteristics: a. 4mm Digital Audio Tape format b. Accept industry standard magnetic 4mm DAT (i.e. DDS-90) c. Data transfer rate of 200KB/sec
			C-HRD-23100	A	The Bulletin Board Server processor shall include a dedicated terminal to be used as a local systems operations console.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-36020	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to respond to requests for managed object MIB attributes
			C-MSS-36050	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to receive ECS management set message from the Monitor/Control Service.
			C-MSS-36040	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to send ECS management traps/events to the Monitor/Control Service.
			C-MSS-36060	IR1	The MSS Management Agent Service shall provide an ECS management agent that is configurable to include: a. Community to respond to and set attributes b. Agent location & contact person c. Traps to send d. Events to log & log file name
			C-MSS-36010	IR1	The MSS Management Agent Service shall retrieve data from ECS managed objects in test or operational mode.
			S-INS-60150	IR1	The ICLHW CI shall have provision for Initialization, Recovery, and an orderly shutdown.
			S-INS-60410	A	The ICLHW CI shall provide maintenance interfaces to support the function of System Maintenance.
			S-INS-60420	A	The ICLHW CI shall provide operations interfaces to support the function of System Maintenance.
			S-PLS-60630	A	The PLNHW CI shall provide maintenance interfaces to support the function of System Maintenance.
			S-PLS-60640	A	The PLNHW CI shall provide operations interfaces to support the function of System Maintenance.
			S-DPS-60080	IR1	The SPRHW CI shall have provision for Initialization, Recovery, and an orderly shutdown.
			S-DPS-70060	IR1	The AITHW CI shall have provision for Initialization, Recovery, and an orderly shutdown.
			C-MSS-36070	IR1	The MSS Management Agent Service shall provide an ECS management agent for network devices

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-60010	IR1	The MSS Fault Management Application Service shall provide the capability to create and display graphical representations of a given network topology consisting of the following: a. routers b. communication lines c. hosts d. peripherals e. applications
			C-MSS-60020	IR1	The MSS Fault Management Application Service shall provide the capability to define categories of faults.
			C-MSS-60080	IR1	The MSS Fault Management Application Service shall have the capability to establish, view, modify and delete thresholds on performance metrics it measures.
			C-MSS-68000	IR1	The MSS performance management application service shall be capable of graphically displaying the operational state of managed objects through the MUI service.
			C-MSS-68010	IR1	The MSS performance management application service shall be capable of displaying M&O staff-selected performance statistics through the MUI in tabular and graphical formats.
			C-MSS-70130	IR1	The MSS site Security Management Application Service shall provide a command line interface and a GUI for the management of the following security databases: a. Authentication Database b. Authorization Database c. Network Database
			S-DSS-00251	A	The SDSRV CI custom GUIs shall conform to the guidelines in version 5.1 of the ECS Interface Style Guide.
			S-DSS-30162	A	The DDIST CI custom GUIs shall conform to the guidelines in Version 5.1 of the ECS User Interface Style Guide.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
EOSD1703#B	ECS shall provide maintenance and operations interfaces to the DAACs to support the functions of: a). System Management b). Science Algorithm Integration c). Product Generation d). Data Archive/Distribution e). User Support Services f). System Maintenance	B: all DAACs	C-MSS-60030	A	The MSS Fault Management Application Service shall provide the capability to assign faults to categories.
			C-MSS-60040	A	The MSS Fault Management Application Service shall provide the capability to assign severity levels to faults.
			C-MSS-60050	A	The MSS Fault Management Application Service shall be capable of providing the Management Data Access Service with a configurable list of fault categories that specify whether to enable or disable the logging of fault notifications for that fault category.
			C-MSS-60060	A	The MSS Fault Management Application Service shall provide the capability to enable or disable the display of fault notifications received from a specific managed object based on fault category assigned to that fault.
			C-MSS-60070	A	The MSS Fault Management Application Service shall provide the capability to specify additional information to be added to a disk log file, based on the fault category, when the notification of a fault is received.
			C-MSS-76040	A	The MSS Accountability Management Service shall be capable of reporting audit information to M&O staff via the MUI service.
			C-MSS-69030	A	The MSS performance management application service shall be capable of providing results of benchmark tests and results of predefined tests to the M&O staff for validation.
			C-MSS-70510	A	The MSS site Security Management Application Service shall, upon the detection of a compromise, isolate the compromised input I/O, and the compromised area's output I/O until the compromise has been eliminated.
			C-MSS-36080	A	The MSS Management Agent Service shall provide an extensible ECS management agent for ECS Host systems
			C-MSS-36090	A	The MSS Management Agent Service shall provide an extensible ECS management agent for ECS applications

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-36100	A	The MSS Management Agent Service shall provide proxy agents for ECS network devices and applications that cannot be managed via SNMP.
			C-MSS-36110	A	The MSS Management Agent Service shall provide an ECS domain manager agent to coordinate and communicate with multiple ECS management agents.
			C-MSS-36020	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to respond to requests for managed object MIB attributes
			C-MSS-36050	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to receive ECS management set message from the Monitor/Control Service.
			C-MSS-36040	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to send ECS management traps/events to the Monitor/Control Service.
			C-MSS-36060	IR1	The MSS Management Agent Service shall provide an ECS management agent that is configurable to include: a. Community to respond to and set attributes b. Agent location & contact person c. Traps to send d. Events to log & log file name
			C-MSS-36010	IR1	The MSS Management Agent Service shall retrieve data from ECS managed objects in test or operational mode.
			S-INS-60150	IR1	The ICLHW CI shall have provision for Initialization, Recovery, and an orderly shutdown.
			S-INS-60410	A	The ICLHW CI shall provide maintenance interfaces to support the function of System Maintenance.
			S-INS-60420	A	The ICLHW CI shall provide operations interfaces to support the function of System Maintenance.
			S-PLS-60630	A	The PLNHW CI shall provide maintenance interfaces to support the function of System Maintenance.
			S-PLS-60640	A	The PLNHW CI shall provide operations interfaces to support the function of System Maintenance.
			S-DPS-60080	IR1	The SPRHW CI shall have provision for Initialization, Recovery, and an orderly shutdown.
			S-DPS-70060	IR1	The AITHW CI shall have provision for Initialization, Recovery, and an orderly shutdown.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-CSS-02100	B	The CSS-DCHW CI Enterprise Communications Server processor shall include a dedicated terminal to be used as a local systems operations console.
			C-CSS-02140	B	The CSS-DCHW CI Enterprise Communications Server processor terminal shall be compatible with the Management Workstation display device.
			C-CSS-02210	B	The CSS-DCHW CI Enterprise Communications Server data storage shall be compatible with the Communications Server short-term data storage.
			C-CSS-02230	B	The CSS-DCHW CI Enterprise Communications Server data storage shall have the following hot swappable components: a. Disks b. Power Supplies c. Fans d. Disk-array controllers
			C-CSS-02250	B	The CSS-DCHW CI Enterprise Communications Server data storage shall be capable of archiving data to the ECS Data Server archive for data archive.
			C-CSS-02260	B	The CSS-DCHW CI Enterprise Communications Server data archive shall adhere to ECS data server archival requirements for data storage and retrieval.
			C-CSS-02300	B	The CSS-DCHW CI Enterprise Communications Server peripheral disk drives shall be capable of retrieving data stored from both the Enterprise Communications server data storage and data archive.
			C-CSS-02400	B	The CSS-DCHW CI Enterprise Communications Server peripherals shall support at least one tape drive.
			C-CSS-02410	B	The CSS-DCHW CI Enterprise Communications Server peripheral tape drive shall have the following characteristics: a. 4mm Digital Audio Tape format b. Accept industry standard magnetic 4mm DAT (i.e. DDS-90)
			C-CSS-02420	B	The CSS-DCHW CI Enterprise Communications Server shall provide a peripheral tape drive.
			C-CSS-02700	B	The CSS-DCHW CI Local Communications Server processor shall include a dedicated terminal to be used as a local systems operations console.
			C-CSS-02740	B	The CSS-DCHW CI Local Communications Server processor terminal shall be compatible with the Management Workstation display device.
			C-CSS-02850	B	The CSS-DCHW CI Local Communications Server data storage shall be capable of archiving data to the ECS Data Server archive.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-CSS-02860	B	The CSS-DCHW CI Local Communications Server data archive shall adhere to ECS Data Server archival requirements for data storage and retrieval.
			C-CSS-02900	B	The CSS-DCHW CI Local Communications Server peripheral disk drives shall be capable of retrieving data stored from both the Local Communications server data storage and data archive.
			C-CSS-03000	B	The CSS-DCHW CI Local Communications Server peripherals shall support at least one tape drive.
			C-CSS-03010	B	The CSS-DCHW CI Local Communications Server peripheral tape drive shall have the following characteristics: a. 4mm Digital Audio Tape format b. Accept industry standard magnetic 4mm DAT (i.e. DDS-90)
			C-CSS-03020	B	The CSS-DCHW CI Local Communications Server shall provide a peripheral tape drive.
			C-CSS-03300	B	The CSS-DCHW CI Bulletin Board Server processor shall include a dedicated terminal to be used as a local systems operations console.
			C-CSS-03340	B	The CSS-DCHW CI Bulletin Board Server processor terminal shall be compatible with the Management Workstation display device.
			C-MSS-02100	B	The MSS-MHW CI Enterprise Monitoring Server processor shall include a dedicated terminal to be used as a local systems operations console.
			C-MSS-02140	B	The MSS-MHW CI Enterprise Monitoring Server processor terminal shall be compatible with the Management Workstation display device.
			C-MSS-02210	B	The MSS-MHW CI Enterprise Monitoring Server data storage shall be compatible with the Local System Management Server short-term data storage.
			C-MSS-02250	B	The MSS-MHW CI Enterprise Monitoring Server data storage shall be capable of archiving data to the ECS data server archive for data archive.
			C-MSS-02260	B	The MSS-MHW CI Enterprise Monitoring Server data archive shall adhere to ECS data server archival requirements for data storage and retrieval.
			C-MSS-02300	B	The MSS-MHW CI Enterprise Monitoring Server peripheral disk drives shall be capable of retrieving data stored from both the enterprise monitoring server data storage and data archive.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-02400	B	The MSS-MHW CI Enterprise Monitoring Server peripherals shall support at least one tape drive.
			C-MSS-02410	B	The MSS-MHW CI Enterprise Monitoring Server peripheral tape drive shall have the following characteristics: a. 4mm Digital Audio Tape format b. Accept industry standard magnetic 4mm DAT (i.e. DDS-90)
			C-MSS-02420	B	The MSS-MHW CI Enterprise Monitoring Server peripherals shall support at least one tape drive.
			C-MSS-02700	B	The MSS-MHW CI Local Management Server processor shall include a dedicated terminal to be used as a local systems operations console.
			C-MSS-02740	B	The MSS-MHW CI Local Management Server processor terminal shall be compatible with the Management Workstation display device.
			C-MSS-02850	B	The MSS-MHW CI Local Management Server data storage shall be capable of archiving data to the ECS Data Server archive for data archive.
			C-MSS-02860	B	The MSS-MHW CI Local Management Server data archive shall adhere to ECS Data Server archival requirements for data storage and retrieval.
			C-MSS-03010	B	The MSS-MHW CI Local Management Server peripheral tape drive shall have the following characteristics: a. 4mm Digital Audio Tape format b. Accept industry standard magnetic 4mm DAT (i.e. DDS-90)
			C-MSS-03020	B	The MSS-MHW CI Local Management Server peripheral tape drive shall have a data transfer rate of 200KB/sec.
			C-MSS-03300	B	At a minimum, each MSS-MHW CI processor shall have the capability to support a POSIX compliant IEEE 1003.1 operating system (UNIX).
			C-MSS-03310	B	Each MSS-MHW CI Management Workstation shall provide one QWERTY keyboard.
			C-MSS-03320	B	Each Management Workstation keyboard shall be detachable and cabled for movement on a desk-top style workstation area.
			C-MSS-03330	B	Each Management Workstation keyboard shall provide a minimum of 12 programmable function keys.
			C-MSS-03340	B	Each MSS-MHW CI Management Workstation shall provide one color text and graphics display device.
			C-MSS-03350	B	The MSS-MHW CI display driver device shall display the complete ASCII character set.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-03360	B	The MSS-MHW CI display driver device shall provide a minimum of 1024 pixel x 864 lines resolution display.
			C-MSS-03370	B	The MSS-MHW CI display driver device shall display a minimum of 16 colors.
			C-MSS-03380	B	The MSS-MHW CI display driver device shall display pages 24 lines by 80 characters wide.
			C-MSS-03390	B	The MSS-MHW CI display driver device shall display a minimum of four screen display pages.
			C-MSS-03400	B	The MSS-MHW CI display driver device shall display pages readable from any location along the width of the workstation and up to a distance of 6 feet from the screen.
			C-MSS-03410	B	The MSS-MHW CI display driver device shall provide a minimum of 19 inches diagonal non-glare screen.
			C-MSS-03420	B	The MSS-MHW CI display driver device shall provide RGB video output for hard copy.
			C-MSS-03430	B	The MSS-MHW CI display driver device shall provide feature an integral swivel/tilt base.
			C-MSS-03440	B	The MSS-MHW CI display driver device shall provide brightness, contrast and power controls within easy reach.
			C-MSS-03450	B	The MSS-MHW CI display driver device shall display the complete ASCII character set.
			C-MSS-03460	B	The MSS-MHW CI Management Workstation shall provide one cursor pointing device (mouse).
			C-MSS-03470	B	The MSS-MHW CI Management Workstation shall be upgradeable/replaceable within the same product family.
			C-MSS-36070	IR1	The MSS Management Agent Service shall provide an ECS management agent for network devices
			C-MSS-60010	IR1	The MSS Fault Management Application Service shall provide the capability to create and display graphical representations of a given network topology consisting of the following: a. routers b. communication lines c. hosts d. peripherals e. applications
			C-MSS-60020	IR1	The MSS Fault Management Application Service shall provide the capability to define categories of faults.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-60080	IR1	The MSS Fault Management Application Service shall have the capability to establish, view, modify and delete thresholds on performance metrics it measures.
			C-MSS-68000	IR1	The MSS performance management application service shall be capable of graphically displaying the operational state of managed objects through the MUI service.
			C-MSS-68010	IR1	The MSS performance management application service shall be capable of displaying M&O staff-selected performance statistics through the MUI in tabular and graphical formats.
			C-MSS-70130	IR1	The MSS site Security Management Application Service shall provide a command line interface and a GUI for the management of the following security databases: a. Authentication Database b. Authorization Database c. Network Database
EOSD1703#Ir1	ECS shall provide maintenance and operations interfaces to the DAACs to support the functions of: b). Science Algorithm Integration	IR-1: IR1 shall provide a GUI interface for displaying the operational state of managed objects in the AITTL CI.	C-MSS-36020	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to respond to requests for managed object MIB attributes
			C-MSS-36050	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to receive ECS management set message from the Monitor/Control Service.
			C-MSS-36040	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to send ECS management traps/events to the Monitor/Control Service.
			C-MSS-36060	IR1	The MSS Management Agent Service shall provide an ECS management agent that is configurable to include: a. Community to respond to and set attributes b. Agent location & contact person c. Traps to send d. Events to log & log file name
			C-MSS-36010	IR1	The MSS Management Agent Service shall retrieve data from ECS managed objects in test or operational mode.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-INS-60150	IR1	The ICLHW CI shall have provision for Initialization, Recovery, and an orderly shutdown.
			S-DPS-60080	IR1	The SPRHW CI shall have provision for Initialization, Recovery, and an orderly shutdown.
			S-DPS-70060	IR1	The AITHW CI shall have provision for Initialization, Recovery, and an orderly shutdown.
			C-MSS-36070	IR1	The MSS Management Agent Service shall provide an ECS management agent for network devices
			C-MSS-60010	IR1	The MSS Fault Management Application Service shall provide the capability to create and display graphical representations of a given network topology consisting of the following: a. routers b. communication lines c. hosts d. peripherals e. applications
			C-MSS-60020	IR1	The MSS Fault Management Application Service shall provide the capability to define categories of faults.
			C-MSS-60080	IR1	The MSS Fault Management Application Service shall have the capability to establish, view, modify and delete thresholds on performance metrics it measures.
			C-MSS-68000	IR1	The MSS performance management application service shall be capable of graphically displaying the operational state of managed objects through the MUI service.
			C-MSS-68010	IR1	The MSS performance management application service shall be capable of displaying M&O staff-selected performance statistics through the MUI in tabular and graphical formats.
			C-MSS-70130	IR1	The MSS site Security Management Application Service shall provide a command line interface and a GUI for the management of the following security databases: a. Authentication Database b. Authorization Database c. Network Database
EOSD1705#A	ECS shall support interfaces to DAAC Unique components.	A: interfaces to support L7 testing @ EDC	C-MSS-36020	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to respond to requests for managed object MIB attributes

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-36050	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to receive ECS management set message from the Monitor/Control Service.
			C-MSS-36040	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to send ECS management traps/events to the Monitor/Control Service.
			C-MSS-36060	IR1	The MSS Management Agent Service shall provide an ECS management agent that is configurable to include: a. Community to respond to and set attributes b. Agent location & contact person c. Traps to send d. Events to log & log file name
			C-MSS-36010	IR1	The MSS Management Agent Service shall retrieve data from ECS managed objects in test or operational mode.
			S-DPS-60617	A	The SPRHW CI platforms shall have provision for interfacing with Planning.
			C-MSS-36070	IR1	The MSS Management Agent Service shall provide an ECS management agent for network devices
EOSD1705#B	ECS shall support interfaces to DAAC Unique components.	B: ASF SAR interface testing, CIESIN interoperability. For compliance see DID207.	C-MSS-36020	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to respond to requests for managed object MIB attributes
			C-MSS-36050	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to receive ECS management set message from the Monitor/Control Service.
			C-MSS-36040	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to send ECS management traps/events to the Monitor/Control Service.
			C-MSS-36060	IR1	The MSS Management Agent Service shall provide an ECS management agent that is configurable to include: a. Community to respond to and set attributes b. Agent location & contact person c. Traps to send d. Events to log & log file name

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-36010	IR1	The MSS Management Agent Service shall retrieve data from ECS managed objects in test or operational mode.
			S-DPS-60615	A	The SPRHW CI platforms shall have provision for interfacing with Ingest
			S-DPS-60617	A	The SPRHW CI platforms shall have provision for interfacing with Planning.
			C-MSS-36800	B	The Management Agent Service shall have the capability to receive from the ASF, statistical and accounting information in ECS's standard API format.
			S-DPS-20020	B	The PRONG CI shall have the capability to incorporate DAAC-developed software required to support discipline specific needs.
			S-DPS-21860	B	The PRONG CI HMI Functions shall be accessible via an API (Application Program Interface).
			S-PLS-60610	A	The PLNHW CI shall interface with the ISS.
			C-MSS-36070	IR1	The MSS Management Agent Service shall provide an ECS management agent for network devices
EOSD1710#A	ECS elements shall exchange with ADCs/ODCs, such as NOAA and other data processing and archiving facilities, information including the following: a. Directories b. Product Orders c. Order Status d. Science Data e. Management Data	A: NOAA ADC 1-way interoperability ECS to NOAA	C-MSS-60160	A	The MSS EMC Fault Management Application Service shall have the capability to receive notifications of detected faults and degradation of performance from: a. Site fault management applications b. Other external systems as defined in Section 5.1.
			C-MSS-60180	A	The MSS EMC Fault Management Application Service shall be capable of receiving summarized fault notification and performance degradation data from: a. Site fault management applications b. Other external systems as defined in Section 5.1.
			C-MSS-60210	A	The MSS Fault Management Application Service shall maintain a list of external service providers, M&O operators, and applications to be notified in the event that a specified fault is detected.
			C-MSS-18260	A	The MSS Management Data Access Service shall have the capability to schedule the transfer and loading log files into the management database at the site.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-18270	A	The MSS Management Data Access Service shall have the capability to schedule the archiving of log files at the site.
			C-MSS-18280	A	The MSS Management Data Access Service shall have the capability to schedule the transfer of management data at the sites to the SMC.
			C-MSS-18350	A	The MSS Management Data Access Service shall provide the capability for an application to load log files into the management database at the site
			C-MSS-60220	A	The MSS Fault Management Application Service shall have the capability to send the notification of a fault to registered recipients.
			C-MSS-18060	A	The Management Data Access Service shall provide the capability for an application to access management data.
			S-INS-00100	IR1	The INGST CI shall provide the capability to periodically check a location accessible to the ESN for the presence of data granule files.
			S-INS-00110	IR1	The INGST CI shall submit an Polling Ingest Request after detecting the presence of data granule files in a location accessible to the ESN. The request shall contain the file location.
			S-INS-00620	IR1	The INGST CI shall ingest data, provided by the DAO, from the ESN into the LaRC DAAC using a file transfer protocol.
			S-INS-00630	IR1	The INGST CI shall ingest data, provided by NESDIS, from the ESN into the LaRC DAAC using a file transfer protocol.
			S-INS-00640	IR1	The INGST CI shall ingest data, provided by the DAO, from the ESN into the GSFC DAAC using a file transfer protocol.
			C-MSS-66140	A	The MSS EMC Performance Management Application Service shall have the capability to request performance data from: a. Site performance management applications b. Other external systems as defined in Section 5.1 of the current version od 304-CD-003.
			C-MSS-66150	A	The MSS EMC Performance Management Application Service shall be capable of receiving performance data from: a. Site performance management applications b. Other external systems as defined in Section 5.1 of the current version of 304-CD-003.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-66160	A	The MSS EMC Performance Management Application Service shall be capable of receiving summarized performance data from: a. Site performance management applications b. Other external systems as defined in Section 5.1 of the current version 304-CD-003.
			C-MSS-60170	IR1	The MSS EMC Fault Management Application Service shall be capable of requesting fault notification and performance degradation data from : a. Site Fault Management Applications b. Other external systems as defined in Section 5.1.
			C-MSS-60370	IR1	The MSS Fault Management Application Service at the SMC shall be capable of sending gathered isolation, location, identification and characterization of reported faults data to the level of subsystem and equipment to the following: a. the site Fault Management Applications b. other external systems as defined in Section 5.1 of the current version of 304-CD-003.
EOSD1710#B	ECS elements shall exchange with ADCs/ODCs, such as NOAA and other data processing and archiving facilities, information including the following: a. Directories b. Product Orders c. Order Status d. Science Data e. Management Data	B: 2-way interoperability	C-MSS-60210	A	The MSS Fault Management Application Service shall maintain a list of external service providers, M&O operators, and applications to be notified in the event that a specified fault is detected.
			C-MSS-18260	A	The MSS Management Data Access Service shall have the capability to schedule the transfer and loading log files into the management database at the site.
			C-MSS-18270	A	The MSS Management Data Access Service shall have the capability to schedule the archiving of log files at the site.
			C-MSS-18280	A	The MSS Management Data Access Service shall have the capability to schedule the transfer of management data at the sites to the SMC.
			C-MSS-18350	A	The MSS Management Data Access Service shall provide the capability for an application to load log files into the management database at the site

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-60220	A	The MSS Fault Management Application Service shall have the capability to send the notification of a fault to registered recipients.
			C-MSS-18060	A	The Management Data Access Service shall provide the capability for an application to access management data.
			S-INS-00100	IR1	The INGST CI shall provide the capability to periodically check a location accessible to the ESN for the presence of data granule files.
			S-INS-00110	IR1	The INGST CI shall submit an Polling Ingest Request after detecting the presence of data granule files in a location accessible to the ESN. The request shall contain the file location.
			S-INS-00620	IR1	The INGST CI shall ingest data, provided by the DAO, from the ESN into the LaRC DAAC using a file transfer protocol.
			S-INS-00630	IR1	The INGST CI shall ingest data, provided by NESDIS, from the ESN into the LaRC DAAC using a file transfer protocol.
			S-INS-00640	IR1	The INGST CI shall ingest data, provided by the DAO, from the ESN into the GSFC DAAC using a file transfer protocol.
			C-MSS-18360	B	The MSS Management Data Access Service shall provide the capability for the M&O staff to load log files into the management database at the site.
			C-MSS-60161	B	The MSS EMC Fault Management Application Service shall have the capability to receive notifications of detected faults and degradation of performance from: a. Site fault management applications b. EBnet c. ASTER d. NOAA (SAA) e. Landsat(MMO) f. NSI g. NOLAN

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-60171	B	The MSS EMC Fault Management Application Service shall be capable of requesting fault notification and performance degradation data from : a. Site Fault Management Applications b. EBnet c. ASTER d. NOAA(SAA) e. Landsat(MMO) f. NSI g. NOLAN
			C-MSS-60181	B	The MSS EMC Fault Management Application Service shall be capable of receiving summarized fault notification and performance degradation data from: a. Site fault management applications b. EBnet c. ASTER d. NOAA(SAA) e. Landsat(MMO) f. NSI g. NOLAN
			C-MSS-60371	B	The MSS Fault Management Application Service at the SMC shall be capable of sending gathered isolation, location, identification and characterization of reported faults data to the level of subsystem and equipment to the following: a. Site Fault Management Applications b. EBnet c. ASTER b. NOAA(SAA) e. Landsat (MMO) f. NSI g. NOLAN.
			C-MSS-66141	B	The MSS EMC Performance Management Application Service shall have the capability to request performance data from: a. Site performance management applications b. EBnet c. ASTER d. NOAA(SAA) e. Landsat(MMO) f. NSI g. NOLAN.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-66151	B	The MSS EMC Performance Management Application Service shall be capable of receiving performance data from: a. Site performance management applications b. EBnet c. ASTER d. NOAA(SAA) e. Landsat(MMO) f. NSI g. NOLAN.
			C-MSS-66161	B	The MSS EMC Performance Management Application Service shall be capable of receiving summarized performance data from: a. Site performance management applications b. EBnet c. ASTER d. NOAA(SAA) e. Landsat(MMO) f. NSI g. NOLAN.
EOSD1710#Ir1	ECS elements shall exchange with ADCs/ODCs, such as NOAA and other data processing and archiving facilities, information including the following: d. Science Data		S-INS-00100	IR1	The INGST CI shall provide the capability to periodically check a location accessible to the ESN for the presence of data granule files.
			S-INS-00110	IR1	The INGST CI shall submit an Polling Ingest Request after detecting the presence of data granule files in a location accessible to the ESN. The request shall contain the file location.
			S-INS-00620	IR1	The INGST CI shall ingest data, provided by the DAO, from the ESN into the LaRC DAAC using a file transfer protocol.
			S-INS-00630	IR1	The INGST CI shall ingest data, provided by NESDIS, from the ESN into the LaRC DAAC using a file transfer protocol.
			S-INS-00640	IR1	The INGST CI shall ingest data, provided by the DAO, from the ESN into the GSFC DAAC using a file transfer protocol.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
EOSD1720#A	ECS elements shall receive from the ECS user community the following types of data requests at a minimum: b. Data Distribution Requests c. Reprocessing Requests	A: b-limited to operable DAACs c-CERES/LIS for TRMM only for MSFC, LaRC	S-DSS-30260	A	The DDIST CI shall log the receipt of a Data Distribution Request in the Distribution Activity Log.
			S-PLS-00010	A	The PLANG CI shall accept Production Requests for specific Data Products with associated time windows that are to be routinely generated.
			S-DPS-60135	A	The SPRHW CI design and implementation shall have the flexibility to accommodate Science Processing expansion up to a factor of 3 in its capacity with no changes in its design and up to a factor of 10 without major changes to its design.
			S-DSS-30020	A	Distribution Requests shall have the format described in Appendix A of the current version of 304-CD-002 for Release A and as specified in Appendix K of the current version of 304-CD-005 for Release B.
			S-DSS-30030	A	The DDIST CI shall validate each Electronic Distribution Request and verify that the format conforms to that specified in Appendix A of the current version of 304-CD-002 for Release A and as specified in Appendix K of the current version of 304-CD-005 for Release B.
			S-DSS-30060	A	The DDIST CI shall validate each Media Distribution Request and verify that it conforms to the format specified in Appendix A of the current version of 304-CD-002 for Release A and as specified in Appendix K of the current version of 304-CD-005 for Release B.
EOSD1720#B	ECS elements shall receive from the ECS user community the following types of data requests at a minimum: a. Data Acquisition Requests b. Data Distribution Requests c. Reprocessing Requests		S-DSS-30260	A	The DDIST CI shall log the receipt of a Data Distribution Request in the Distribution Activity Log.
			S-PLS-00010	A	The PLANG CI shall accept Production Requests for specific Data Products with associated time windows that are to be routinely generated.
			S-DPS-60135	A	The SPRHW CI design and implementation shall have the flexibility to accommodate Science Processing expansion up to a factor of 3 in its capacity with no changes in its design and up to a factor of 10 without major changes to its design.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-PLS-00070	B	The PLANG CI shall accept Production Requests for reprocessing of Data Products from currently available input data.
			S-DSS-30020	A	Distribution Requests shall have the format described in Appendix A of the current version of 304-CD-002 for Release A and as specified in Appendix K of the current version of 304-CD-005 for Release B.
			S-DSS-30030	A	The DDIST CI shall validate each Electronic Distribution Request and verify that the format conforms to that specified in Appendix A of the current version of 304-CD-002 for Release A and as specified in Appendix K of the current version of 304-CD-005 for Release B.
			S-DSS-30060	A	The DDIST CI shall validate each Media Distribution Request and verify that it conforms to the format specified in Appendix A of the current version of 304-CD-002 for Release A and as specified in Appendix K of the current version of 304-CD-005 for Release B.
EOSD1730#B	ECS elements shall receive from the ECS user community Special Products, research results, and new derived data sets produced from EOS data.				
EOSD1740#A	ECS elements shall send the following types of data at a minimum to the ECS user community: a. Metadata b. Browse data c. Science data		S-DSS-04640	A	The SDSRV CI shall provide services to retrieve Metadata from the Inventory.
			S-DSS-04660	A	The SDSRV CI shall provide Result Sets to the client, in response to Search Requests
EOSD1740#B	ECS elements shall send the following types of data at a minimum to the ECS user community: a. Metadata b. Browse data c. Science data		S-DSS-04640	A	The SDSRV CI shall provide services to retrieve Metadata from the Inventory.
			S-DSS-04660	A	The SDSRV CI shall provide Result Sets to the client, in response to Search Requests

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
EOSD1750#A	ECS elements shall receive data including the following types of supporting information from the ECS science community (TLs, TMs, PIs, and Co-Is): a. Algorithms b. Software fixes c. Instrument calibration data d. Integration support requests e. Metadata for Special Products archiving f. Data transfer requests (inventories, directories, and browse) g. Data Quality/Instrument assessment h. Instrument operations information i. Ancillary data	A: TRMM and affected DAACs	C-CSS-60530	A	The CSS File Access Service shall support the kerberized version of File Transfer Protocol for secured file transfers.
			C-CSS-60520	IR1	The CSS File Access Service shall support the File Transfer Protocol (FTP).
			S-INS-00010	IR1	The INGST CI shall accept Network Ingest Requests to request automated electronic network ingest of a collection of Data. The collection of Data shall describe one or more Data Granules.
			S-INS-00020	IR1	The INGST CI shall check the Network Ingest Request to verify that the date/time prior to which the data will remain available is a valid date/time.
			S-INS-00670	A	The INGST CI shall ingest Data, provided by an SCF, from the ESN into the MSFC DAAC using a file transfer protocol.
			S-INS-00680	A	The INGST CI shall ingest Data, provided by an SCF, from the ESN into the LaRC DAAC using a file transfer protocol.
			S-DPS-40010	IR1	The AITTL CI shall have the capability to receive a Science Software Delivery from the SCF electronically via the network.
			S-DPS-40020	A	The AITTL CI shall have the capability to receive a Science Software Delivery from the Science Data Server.
			S-DPS-40030	A	The AITTL CI shall provide the operations staff with the capability to register a Subscription with the Data Server to be notified when a new Science Software Delivery is received.
			S-DPS-40040	A	The AITTL CI shall provide the operations staff with the capability to request transfer of the Science Software Delivery files from the Data Server to the local I&T area.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-INS-00060	IR1	The INGST CI shall report status to the provider of a Network Ingest Request for the following: a. File transfer failure b. File size discrepancies c. Invalid Data Type Identifier d. Missing required metadata e. Metadata parameters out of range f. Data conversion failure g. Failure to archive data h. Inability to transfer data within the specified time window i. Missing required request information j. Successful archive of the data
			C-CSS-61050	IR1	The CSS Electronic Mail Service shall be accessible in interactive mode.
EOSD1750#B	ECS elements shall receive data including the following types of supporting information from the ECS science community (TLs, TMs, PIs, and Co-Is): a. Algorithms b. Software fixes c. Instrument calibration data d. Integration support requests e. Metadata for Special Products archiving f. Data transfer requests (inventories, directories, and browse) g. Data Quality/Instrument assessment h. Instrument operations information i. Ancillary data	B: TRMM, AM-1, and all DAACs	C-CSS-60530	A	The CSS File Access Service shall support the kerberized version of File Transfer Protocol for secured file transfers.
			C-CSS-60520	IR1	The CSS File Access Service shall support the File Transfer Protocol (FTP).
			S-INS-00010	IR1	The INGST CI shall accept Network Ingest Requests to request automated electronic network ingest of a collection of Data. The collection of Data shall describe one or more Data Granules.
			S-INS-00020	IR1	The INGST CI shall check the Network Ingest Request to verify that the date/time prior to which the data will remain available is a valid date/time.
			S-INS-00670	A	The INGST CI shall ingest Data, provided by an SCF, from the ESN into the MSFC DAAC using a file transfer protocol.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-INS-00680	A	The INGST CI shall ingest Data, provided by an SCF, from the ESN into the LaRC DAAC using a file transfer protocol.
			S-DPS-40010	IR1	The AITTL CI shall have the capability to receive a Science Software Delivery from the SCF electronically via the network.
			S-DPS-40020	A	The AITTL CI shall have the capability to receive a Science Software Delivery from the Science Data Server.
			S-DPS-40030	A	The AITTL CI shall provide the operations staff with the capability to register a Subscription with the Data Server to be notified when a new Science Software Delivery is received.
			S-DPS-40040	A	The AITTL CI shall provide the operations staff with the capability to request transfer of the Science Software Delivery files from the Data Server to the local I&T area.
			S-INS-00060	IR1	The INGST CI shall report status to the provider of a Network Ingest Request for the following: a. File transfer failure b. File size discrepancies c. Invalid Data Type Identifier d. Missing required metadata e. Metadata parameters out of range f. Data conversion failure g. Failure to archive data h. Inability to transfer data within the specified time window i. Missing required request information j. Successful archive of the data
			S-DSS-03004	B	The SDSRV CI shall be capable of receiving Ancillary Data.
			S-DSS-03006	B	The SDSRV CI shall be capable of receiving Metadata associated with Ancillary Data.
			C-CSS-61050	IR1	The CSS Electronic Mail Service shall be accessible in interactive mode.
			S-DSS-03340	B	The SDSRV CI shall be capable of receiving Metadata associated with Special Data Products.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
EOSD1750#Ir1	ECS elements shall receive data including the following types of supporting information from the ECS science community (TLs, TMs, PIs, and Co-Is): a. Algorithms b. Software fixes d. Integration support requests	IR1: Applies only to TRMM and AM-1 algorithms and algorithm I&T.	C-CSS-60520	IR1	The CSS File Access Service shall support the File Transfer Protocol (FTP).
			S-DPS-40010	IR1	The AITTL CI shall have the capability to receive a Science Software Delivery from the SCF electronically via the network.
			C-CSS-61050	IR1	The CSS Electronic Mail Service shall be accessible in interactive mode.
EOSD1760#A	The ECS elements shall send the following types of data at a minimum to the ECS science community (TLs, TMs, PIs, and Co-Is): a. Software Problem Reports b. Documentation c. Metadata (copies of inventories) d. Browse data e. Archived data f. Accounting information	A: ASTER GDS NOT A SCIENCE TEAM I/F OF ECS. THIS INFORMATION MAY BE AVAILABLE TO SCIENTIST FROM ECS AFTER THE ASTER GDS SENDS INFORMATION TO THE ECS ARCHIVE.	C-CSS-60520	IR1	The CSS File Access Service shall support the File Transfer Protocol (FTP).
			S-DPS-42700	IR1	The operations staff shall have the capability to enter and track discrepancy reports related to AI&T.
			S-DPS-42740	IR1	The operations staff shall reports on the status of I&T-related discrepancy reports.
			C-CSS-61050	IR1	The CSS Electronic Mail Service shall be accessible in interactive mode.
			C-CSS-61060	IR1	The CSS Electronic Mail Service shall be accessible in non-interactive mode via API.
EOSD1760#B	The ECS elements shall send the following types of data at a minimum to the ECS science community (TLs, TMs, PIs, and Co-Is): a. Software Problem Reports b. Documentation c. Metadata (copies of inventories) d. Browse data e. Archived data f. Accounting information	B: FOR THE ASTER GDS INTERFACE	C-CSS-60520	IR1	The CSS File Access Service shall support the File Transfer Protocol (FTP).

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DPS-42700	IR1	The operations staff shall have the capability to enter and track discrepancy reports related to AI&T.
			S-DPS-42740	IR1	The operations staff shall reports on the status of I&T-related discrepancy reports.
			C-CSS-61050	IR1	The CSS Electronic Mail Service shall be accessible in interactive mode.
			C-CSS-61060	IR1	The CSS Electronic Mail Service shall be accessible in non-interactive mode via API.
EOSD1760#Ir1	The ECS elements shall send the following types of data at a minimum to the ECS science community (TLs, TMs, PIs, and Co-Is): a. Software Problem Reports	IR1: Applies only to TRMM and AM-1 algorithms.	C-CSS-60520	IR1	The CSS File Access Service shall support the File Transfer Protocol (FTP).
			S-DPS-42700	IR1	The operations staff shall have the capability to enter and track discrepancy reports related to AI&T.
			S-DPS-42740	IR1	The operations staff shall reports on the status of I&T-related discrepancy reports.
			C-CSS-61050	IR1	The CSS Electronic Mail Service shall be accessible in interactive mode.
			C-CSS-61060	IR1	The CSS Electronic Mail Service shall be accessible in non-interactive mode via API.
EOSD1770#A	ECS elements shall exchange the following types of data at a minimum with the IPs: a. Instrument command loads b. Science data c. Planning and scheduling data d. Directories e. Product Orders	A: limited interface testing with ASTER (selected planning and scheduling data). Note: Instrument command load information is included in planning and scheduling data.	C-MSS-10110	A	The MSS shall interface with the International Partners (IP) for Data Interoperability to exchange data identified in Table 5.1-1 as specified in ECS/IP IRD, 194-219-SE1-015.
EOSD1770#B	ECS elements shall exchange the following types of data at a minimum with the IPs: a. Instrument command loads b. Science data c. Planning and scheduling data d. Directories e. Product Orders	B: Full implementation for ASTER. NOTE: ASTER GDS/SDPS interfaces at EDC DAAC only.			

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
EOSD1990#A	The ECS system and elements shall employ security measures and techniques for all applicable security disciplines which are identified in the preceding documents. These documents shall provide the basis for the ECS security policy.	A: as determined in the technical security planning policy activity documented in EOSD2100.	C-CSS-63050	A	The CSS Virtual Terminal shall support kerberized version of the telnet protocol for secure authentication of users.
			C-CSS-60310	A	The CSS File Access Service shall support access control for the remote files.
			C-CSS-21010	A	The CSS Security service shall not transmit passwords in clear text across networks.
			C-CSS-21170	A	The CSS Security service shall provide an API to maintain the integrity of the data passing between processes by using checksums at the following three levels: a. connect level b. request level c. packet level
			C-CSS-21180	A	The CSS Security service shall provide an API to encrypt and send the data passing between processes at the following three levels: a. connect level b. request level c. packet level
			C-CSS-21200	A	The CSS Security service shall support the Data Encryption Standard (DES) to encrypt and decrypt data.
			C-CSS-60530	A	The CSS File Access Service shall support the kerberized version of File Transfer Protocol for secured file transfers.
			C-ISS-02040	A	The ISS shall provide the capability to filter packets based upon network layer source and/or destination addresses.
			C-HRD-37000	A	The ISS networks shall support the use of network and transport layer filtering to control access from internal and external interfaces.
			C-CSS-21020	IR1	The CSS Security service shall provide the capability to create/modify/delete user accounts and privileges in the security registry.
			C-CSS-21030	IR1	The CSS Security service shall provide the capability to define/modify/delete group information in the security registry.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-CSS-21000	IR1	The CSS Security service shall provide an API to verify the identity of users.
			C-ISS-02010	IR1	The ISS shall provide the capability to filter packets based on the port/socket of the transport layer protocol.
EOSD1990#B	The ECS system and elements shall employ security measures and techniques for all applicable security disciplines which are identified in the preceding documents. These documents shall provide the basis for the ECS security policy.		C-CSS-63050	A	The CSS Virtual Terminal shall support kerberized version of the telnet protocol for secure authentication of users.
			C-CSS-60310	A	The CSS File Access Service shall support access control for the remote files.
			C-CSS-21010	A	The CSS Security service shall not transmit passwords in clear text across networks.
			C-CSS-21170	A	The CSS Security service shall provide an API to maintain the integrity of the data passing between processes by using checksums at the following three levels: a. connect level b. request level c. packet level
			C-CSS-21180	A	The CSS Security service shall provide an API to encrypt and send the data passing between processes at the following three levels: a. connect level b. request level c. packet level
			C-CSS-21200	A	The CSS Security service shall support the Data Encryption Standard (DES) to encrypt and decrypt data.
			C-CSS-60530	A	The CSS File Access Service shall support the kerberized version of File Transfer Protocol for secured file transfers.
			C-ISS-02040	A	The ISS shall provide the capability to filter packets based upon network layer source and/or destination addresses.
			C-CSS-21020	IR1	The CSS Security service shall provide the capability to create/modify/delete user accounts and privileges in the security registry.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-CSS-21030	IR1	The CSS Security service shall provide the capability to define/modify/delete group information in the security registry.
			C-CSS-29010	B	The CSS Transaction Processing Service shall use the CSS Security services.
			C-CSS-65000	B	The CSS Secure Web service shall support the Kerberos standard.
			C-CSS-21000	IR1	The CSS Security service shall provide an API to verify the identity of users.
			C-ISS-02010	IR1	The ISS shall provide the capability to filter packets based on the port/socket of the transport layer protocol.
EOSD2100#A	The ECS technical security policy planning shall be comprehensive and shall cover at least the following areas: a. Applicability of the C2 Level of Trustedness as defined by the NSA b. Applicability of the C2 Object Reuse capability c. Discretionary control and monitoring of user access d. ECS communications, network access, control, and monitoring e. Computer system "virus" monitoring, detection, and remedy f. Data protection controls g. Account/privilege management and user session tailoring h. Restart/recovery i. Security audit trail generation j. Security analysis and reporting k. Risk analysis	Compliance demonstrated in DID 214/SE1.	C-CSS-21170	A	The CSS Security service shall provide an API to maintain the integrity of the data passing between processes by using checksums at the following three levels: a. connect level b. request level c. packet level
			C-CSS-21180	A	The CSS Security service shall provide an API to encrypt and send the data passing between processes at the following three levels: a. connect level b. request level c. packet level

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-CSS-21210	A	The CSS Security service shall provide the capability to log audit information into security logs whenever authentication and authorization services are used. The audit information will contain the following: a. Date and time of the event b. User name c. Type of event d. Success or failure of the event e. Origin of the request
			C-CSS-21200	A	The CSS Security service shall support the Data Encryption Standard (DES) to encrypt and decrypt data.
			C-HRD-37000	A	The ISS networks shall support the use of network and transport layer filtering to control access from internal and external interfaces.
			C-MSS-70120	IR1	The MSS site Security Management Application service shall provide the mechanism, for each ECS host, to allow or deny incoming requests from specific hosts to services.
			C-MSS-70100	IR1	The MSS site Security Management Application Service shall provide the capability to set, maintain, and update access control information for ECS resources.
EOSD2100#B	The ECS technical security policy planning shall be comprehensive and shall cover at least the following areas: a. Applicability of the C2 Level of Trustedness as defined by the NSA b. Applicability of the C2 Object Reuse capability c. Discretionary control and monitoring of user access d. ECS communications, network access, control, and monitoring e. Computer system "virus" monitoring, detection, and remedy f. Data protection controls g. Account/privilege management and user session tailoring h. Restart/recovery i. Security audit trail generation j. Security analysis and reporting k. Risk analysis	Compliance demonstrated in DID 214/SE1.	C-CSS-21170	A	The CSS Security service shall provide an API to maintain the integrity of the data passing between processes by using checksums at the following three levels: a. connect level b. request level c. packet level

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-CSS-21180	A	The CSS Security service shall provide an API to encrypt and send the data passing between processes at the following three levels: a. connect level b. request level c. packet level
			C-CSS-21210	A	The CSS Security service shall provide the capability to log audit information into security logs whenever authentication and authorization services are used. The audit information will contain the following: a. Date and time of the event b. User name c. Type of event d. Success or failure of the event e. Origin of the request
			C-CSS-21200	A	The CSS Security service shall support the Data Encryption Standard (DES) to encrypt and decrypt data.
			C-MSS-70120	IR1	The MSS site Security Management Application service shall provide the mechanism, for each ECS host, to allow or deny incoming requests from specific hosts to services.
			C-ISS-02500	B	The ISS-INHW CI networks shall support the use of network and transport layer filtering to control access from internal and external interfaces.
			C-MSS-70100	IR1	The MSS site Security Management Application Service shall provide the capability to set, maintain, and update access control information for ECS resources.
EOSD2200#A	Selection criteria meeting overall ECS security policies and system requirements shall be applied when selecting hardware.	Compliance demonstrated in DID 214/SE1.	C-HRD-17000	A	The MSS-MHCI hardware selection criteria shall meet overall ECS security policies and system requirements.
			C-HRD-27000	A	The CSS-DCHCI hardware selection criteria shall meet overall ECS security policies and system requirements.
			C-HRD-27005	A	The CSS-DCHCI Bulletin Board Server shall provide a security perimeter for ECS.
			C-HRD-27010	A	The CSS-DCHCI Enterprise and Local Communications Servers shall be configured to provide autonomous DAAC security perimeters, FOS isolation, and an Iso-cell ECS security perimeter.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
EOSD2200#B	Selection criteria meeting overall ECS security policies and system requirements shall be applied when selecting hardware.	Compliance demonstrated in DID 214/SE1.	C-CSS-03800	B	The CSS-DCHW CI hardware selection criteria shall meet overall ECS security policies and system requirements.
			C-CSS-03810	B	The CSS-DCHW CI Bulletin Board Server shall provide a security perimeter for ECS.
			C-CSS-03820	B	The CSS-DCHW CI Enterprise and Local Communications Servers shall be configured to provide autonomous DAAC security perimeters, FOS isolation, and an Iso-cell ECS security perimeter.
			C-MSS-03900	B	The MSS-MHW CI hardware selection criteria shall meet overall ECS security policies and system requirements.
EOSD2400#A	ECS shall provide multiple categories of data protection based on the sensitivity levels of ECS data, as defined in NHB 2410.9.		C-CSS-21170	A	The CSS Security service shall provide an API to maintain the integrity of the data passing between processes by using checksums at the following three levels: a. connect level b. request level c. packet level
			C-CSS-21180	A	The CSS Security service shall provide an API to encrypt and send the data passing between processes at the following three levels: a. connect level b. request level c. packet level
			C-CSS-21200	A	The CSS Security service shall support the Data Encryption Standard (DES) to encrypt and decrypt data.
			F-FOS-00450	A	The EOC LAN shall be able to perform filtering based on network address to control access for external and internal interfaces.
			F-FOS-00455	A	The EOC LAN shall be able to perform filtering based on TCP socket number to control access for external and internal interfaces.
			F-FOS-00460	A	The EOC LAN shall be able to perform filtering based on protocol to control access for external and internal interfaces.
			F-FOS-00470	A	The FOS shall provide the capability to authenticate users without sending passwords in the clear across networks.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			F-FOS-00475	A	The FOS shall provide the capability to limit access of EOC files to authenticated IST users.
			F-FOS-00480	A	The FOS shall provide authentication, authorization, and data integrity services that can be used by ISTs located inside and outside the United States.
			S-IOS-00410	A	The capability to add, delete, or modify individual advertising data and service listings shall be limited to authorized users.
			S-DSS-00950	A	The SDSRV CI shall support the processing of Data Requests subject to access controls of read, write, update and delete, singly or in a any combination, based on data types.
			S-DSS-00960	A	The SDSRV CI shall support the processing of Data Requests subject to access controls of read, write, update and delete, singly or in a any combination, based on data ownership.
			S-DSS-20490	A	The STMGT CI shall control access to archived data to prevent unauthorized access.
			S-INS-00150	A	The INGST CI shall verify that the External Data Provider specified in a Hard Media Ingest Request is an authorized provider of hard media to be ingested.
			S-INS-00160	A	The INGST CI shall authenticate that the Hard Media Ingest Request is input by operations staff authorized to ingest hard media data.
			S-INS-00208	A	The INGST CI shall authenticate that the interactive science user entering a Network Ingest Request is authorized to request ingest of data.
			S-INS-00227	A	The INGST CI shall authenticate that the interactive science user entering a Document Ingest Request is authorized to request ingest of data.
			S-INS-00290	A	The INGST CI shall authenticate the User Identifier of operations staff requesting status on all ongoing Ingest Requests.
			S-INS-00317	A	The INGST CI shall authenticate the User Identifier of an application submitting an Ingest Request.
			S-INS-00360	A	The INGST CI shall authenticate the User Identifier of operations staff submitting an ingest Cancellation Request.
			S-INS-00369	A	The INGST CI shall authenticate the User Identifier of an application submitting an ingest Cancellation Request.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-INS-00390	A	The INGST CI shall authenticate the User Identifier of operations staff requesting to set thresholds for concurrent ingest processing.
			S-PLS-00050	A	The PLANG CI shall reject a Production Request if an unauthorized User Identifier is specified.
			S-PLS-00430	A	The PLANG CI shall support the capability to (a) allow (authorized) operations staff updates (enter / modify / delete) of PGE information in the Planning PGE information database, (b) maintain a record of updates made.
			S-DPS-20340	A	The PRONG CI shall reject a Cancel Data Processing Request if the Cancel Data Processing Request is received from an unauthorized source.
			S-DPS-20420	A	The PRONG CI shall reject a Data Processing Request if the Data Processing Request is received from an unauthorized source.
			S-DPS-21880	A	The PRONG CI shall provide a User Interface to authorized users.
			F-FOS-00465	A	The IST toolkit shall provide data integrity services for remote IST users communicating with the EOC.
			S-INS-00175	A	The INGST CI shall report Hard Media Ingest Request status to the MSS event log for the following: a. Unauthorized hard media provider b. Unauthorized operations staff
EOSD2400#B	ECS shall provide multiple categories of data protection based on the sensitivity levels of ECS data, as defined in NHB 2410.9.		C-CSS-21170	A	The CSS Security service shall provide an API to maintain the integrity of the data passing between processes by using checksums at the following three levels: a. connect level b. request level c. packet level
			C-CSS-21180	A	The CSS Security service shall provide an API to encrypt and send the data passing between processes at the following three levels: a. connect level b. request level c. packet level
			C-CSS-21200	A	The CSS Security service shall support the Data Encryption Standard (DES) to encrypt and decrypt data.
			F-FOS-00450	A	The EOC LAN shall be able to perform filtering based on network address to control access for external and internal interfaces.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			F-FOS-00455	A	The EOC LAN shall be able to perform filtering based on TCP socket number to control access for external and internal interfaces.
			F-FOS-00460	A	The EOC LAN shall be able to perform filtering based on protocol to control access for external and internal interfaces.
			S-IOS-00410	A	The capability to add, delete, or modify individual advertising data and service listings shall be limited to authorized users.
			S-DSS-00950	A	The SDSRV CI shall support the processing of Data Requests subject to access controls of read, write, update and delete, singly or in a any combination, based on data types.
			S-DSS-00960	A	The SDSRV CI shall support the processing of Data Requests subject to access controls of read, write, update and delete, singly or in a any combination, based on data ownership.
			S-DSS-20490	A	The STMGT CI shall control access to archived data to prevent unauthorized access.
			S-INS-00030	IR1	The INGST CI shall authenticate the provider of a Network Ingest Request as an authorized provider of data to be ingested.
			S-INS-00150	A	The INGST CI shall verify that the External Data Provider specified in a Hard Media Ingest Request is an authorized provider of hard media to be ingested.
			S-INS-00160	A	The INGST CI shall authenticate that the Hard Media Ingest Request is input by operations staff authorized to ingest hard media data.
			S-INS-00208	A	The INGST CI shall authenticate that the interactive science user entering a Network Ingest Request is authorized to request ingest of data.
			S-INS-00227	A	The INGST CI shall authenticate that the interactive science user entering a Document Ingest Request is authorized to request ingest of data.
			S-INS-00290	A	The INGST CI shall authenticate the User Identifier of operations staff requesting status on all ongoing Ingest Requests.
			S-INS-00317	A	The INGST CI shall authenticate the User Identifier of an application submitting an Ingest Request.
			S-INS-00360	A	The INGST CI shall authenticate the User Identifier of operations staff submitting an ingest Cancellation Request.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-INS-00369	A	The INGST CI shall authenticate the User Identifier of an application submitting an ingest Cancellation Request.
			S-INS-00390	A	The INGST CI shall authenticate the User Identifier of operations staff requesting to set thresholds for concurrent ingest processing.
			S-PLS-00050	A	The PLANG CI shall reject a Production Request if an unauthorized User Identifier is specified.
			S-PLS-00430	A	The PLANG CI shall support the capability to (a) allow (authorized) operations staff updates (enter / modify / delete) of PGE information in the Planning PGE information database, (b) maintain a record of updates made.
			S-DPS-20340	A	The PRONG CI shall reject a Cancel Data Processing Request if the Cancel Data Processing Request is received from an unauthorized source.
			S-DPS-20420	A	The PRONG CI shall reject a Data Processing Request if the Data Processing Request is received from an unauthorized source.
			S-DPS-21880	A	The PRONG CI shall provide a User Interface to authorized users.
			S-CLS-13380	B	The WKBCH CI shall send User Authentication Requests to the SMC.
			S-CLS-13930	B	The WKBCH CI shall be expandable to make accessible to authorized users the current data acquisition schedules and plans for U.S. instruments on foreign spacecraft for the IP Information Management System or an equivalent IP facility.
			S-CLS-14460	B	The WKBCH CI shall make spacecraft schedules accessible to authorized users on request.
			S-DMS-00540	B	The LIMGR CI data accesses shall be subject to read access controls based on data types, user privileges, and data ownership.
			S-DMS-20690	B	The DDICT CI shall provide the capability to add, delete, or modify dictionary entries to authorized users.
			S-DMS-20890	B	The DDICT CI shall provide maintaine Valid Values for data elements, where the data element has an enumerated set of values as a constraint.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DPS-41200	B	The AITTL CI SSAP GUI for adding an Science Software Archive Package to the Data Server shall provide the operations staff with the ability (a) to restrict update access to the Data Server to authorized personnel and (b) to maintain a record of updates made.
			S-DPS-41355	B	The AITTL CI SSAP GUI for updating the PGE Database shall provide the operations staff with the ability (a) to restrict update access to the PGE Database to authorized personnel and (b) to maintain a record of updates made.
			S-DSS-00310	B	The SDSRV CI shall provide the capability for authorized clients to submit Service Requests batch mode.
			S-DSS-01030	B	The SDSRV CI operations staff shall have the capability to receive from the SMC security directives.
			S-DSS-10055	B	The DDSRV CI shall provide, to qualified users, access to all documents and data types held in the server's collection.
			S-INS-00355	B	The INGST CI shall accept an ingest Suspension Request from authorized operations staff to suspend ongoing ingest request processing for a specified ingest Request Identifier, to suspend all ongoing ingest request processing from a specified External Data Provider, or to suspend all ongoing ingest request processing.
			S-INS-00357	B	The INGST CI shall accept an ingest Resumption Request from authorized operations staff to resume ongoing ingest request processing for a specified ingest Request Identifier, to resume all ongoing ingest request processing from a specified External Data Provider, or to resume all ongoing ingest request processing.
			S-INS-00363	B	The INGST CI shall authenticate the User Identifier of operations staff submitting an ingest Suspension Request or ingest Resumption Request.
			S-INS-00365	B	The INGST CI shall accept an ingest Suspension Request from authorized applications to suspend ongoing ingest request processing for a specified Request Identifier, to suspend all ongoing ingest request processing from a specified External Data Provider, or to suspend all ongoing ingest request processing.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-INS-00367	B	The INGST CI shall accept an ingest Resumption Request from authorized applications to resume ongoing ingest request processing for a specified Request Identifier, to resume all ongoing ingest request processing from a specified External Data Provider, or to resume all ongoing ingest request processing.
			S-INS-00370	B	The INGST CI shall authenticate the User Identifier of an application submitting an ingest Suspension Request or ingest Resumption Request.
			S-INS-02000	B	The INGST CI shall interactively accept Document Scanning/Digitizing Requests from authorized operations staff for hard copy media to be ingested.
			S-INS-02010	B	The INGST CI shall authenticate that the Document Scanning/Digitizing Request is input by operations staff authorized to ingest hard copy media.
			S-INS-02020	B	The INGST CI shall verify that the External Data Provider specified in a Document Scanning/Digitizing Request is an authorized provider of hard copy media to be ingested.
			S-CLS-13390	B	The WKBCH CI shall allow or deny the user system access based on User Validation Status returned from the SMC.
			S-DMS-00530	B	The LIMGR CI shall collect Security Management Data (such as rejected access to a service) and provide it to the MSS.
			S-INS-00175	A	The INGST CI shall report Hard Media Ingest Request status to the MSS event log for the following: a. Unauthorized hard media provider b. Unauthorized operations staff
EOSD2430#A	Data base access and manipulation shall accommodate control of user access and update of security controlled data.		C-MSS-70110	A	The MSS site Security Management Application Service shall provide the capability to specify privileges for authorized users and user groups for access to ECS resources.
			C-MSS-90030	A	The DBMS shall provide security access control based upon userid, role and privleges for the following: a. database b. database object c. database operations
			C-MSS-18060	A	The Management Data Access Service shall provide the capability for an application to access management data.
			S-DSS-20490	A	The STMGT CI shall control access to archived data to prevent unauthorized access.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-70100	IR1	The MSS site Security Management Application Service shall provide the capability to set, maintain, and update access control information for ECS resources.
EOSD2430#B	Data base access and manipulation shall accommodate control of user access and update of security controlled data.		C-MSS-70110	A	The MSS site Security Management Application Service shall provide the capability to specify privileges for authorized users and user groups for access to ECS resources.
			C-MSS-90030	A	The DBMS shall provide security access control based upon userid, role and privleges for the following: a. database b. database object c. database operations
			C-MSS-18060	A	The Management Data Access Service shall provide the capability for an application to access management data.
			S-DSS-20490	A	The STMGT CI shall control access to archived data to prevent unauthorized access.
			C-MSS-70100	IR1	The MSS site Security Management Application Service shall provide the capability to set, maintain, and update access control information for ECS resources.
EOSD2440#A	Data base integrity including prevention of data loss and corruption shall be maintained.		C-MSS-90180	A	The DBMS shall provide the following database backup capabilities: a. Entire database b. Incremental data c. User specified database items.
			C-MSS-90190	A	The DBMS shall provide capabilities for specifying frequency, time, and type of backups.
			C-MSS-90230	A	The DBMS shall provide a transaction roll backward capability to a specified time or state: a. Restore a database b. Restore all or operator selected database objects of any database
			C-MSS-90240	A	The DBMS shall provide for automatic database recovery including a means to: a. automatically restore undamaged portions of a database and recover work in progress after a system or component failure b. achieve dynamic backout of database modifications, performed by a failing transaction, that does not affect separate, concurrent tasks

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-90260	A	The DBMS shall provide a capability to export, archival, and restore a database.
			C-MSS-90280	A	The DBMS shall provide the capability to issue and record a database checkpoint.
			C-MSS-18040	A	The MSS Management Data Access Service shall maintain the integrity of the management database.
EOSD2440#B	Data base integrity including prevention of data loss and corruption shall be maintained.		C-MSS-90180	A	The DBMS shall provide the following database backup capabilities: a. Entire database b. Incremental data c. User specified database items.
			C-MSS-90190	A	The DBMS shall provide capabilities for specifying frequency, time, and type of backups.
			C-MSS-90230	A	The DBMS shall provide a transaction roll backward capability to a specified time or state: a. Restore a database b. Restore all or operator selected database objects of any database
			C-MSS-90240	A	The DBMS shall provide for automatic database recovery including a means to: a. automatically restore undamaged portions of a database and recover work in progress after a system or component failure b. achieve dynamic backout of database modifications, performed by a failing transaction, that does not affect separate, concurrent tasks
			C-MSS-90260	A	The DBMS shall provide a capability to export, archival, and restore a database.
			C-MSS-90280	A	The DBMS shall provide the capability to issue and record a database checkpoint.
			C-MSS-18040	A	The MSS Management Data Access Service shall maintain the integrity of the management database.
EOSD2480#A	ECS elements shall require unique sessions when security controlled data are being manipulated.		C-CSS-21005	A	The CSS Security service shall provide a unique session key for each client session.
			C-CSS-21040	A	The CSS Security service shall provide an API to limit the time after which a login context will expire.
			C-CSS-21050	A	The CSS Security Service shall provide an API to refresh login contexts before they expire.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-CSS-21090	A	The CSS Security Service shall provide an API to change the identity of an application process through server keys.
			F-FOS-00420	A	The FOS shall require unique sessions for each operator that access the FOS.
			C-CSS-21100	IR1	The CSS Security service shall provide an API to challenge the client/server to authenticate itself at the following three levels. a. connect level b. request level c. packet level
EOSD2480#B	ECS elements shall require unique sessions when security controlled data are being manipulated.		C-CSS-21005	A	The CSS Security service shall provide a unique session key for each client session.
			C-CSS-21040	A	The CSS Security service shall provide an API to limit the time after which a login context will expire.
			C-CSS-21050	A	The CSS Security Service shall provide an API to refresh login contexts before they expire.
			C-CSS-21090	A	The CSS Security Service shall provide an API to change the identity of an application process through server keys.
			F-FOS-00420	A	The FOS shall require unique sessions for each operator that access the FOS.
			C-CSS-21100	IR1	The CSS Security service shall provide an API to challenge the client/server to authenticate itself at the following three levels. a. connect level b. request level c. packet level

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
EOSD2510#A	ECS elements shall maintain an audit trail of: a. All accesses to the element security controlled data b. Users/processes/elements requesting access to element security controlled data c. Data access/manipulation operations performed on security controlled data d. Date and time of access to security controlled data e. Unsuccessful access attempt to the element security controlled data by unauthorized users/elements/processes f. Detected computer system viruses and worms g. Actions taken to contain or destroy a virus		C-MSS-90290	A	The DBMS shall provide an audit trail of chronological activities in the database.
			C-MSS-76030	A	The MSS Accountability Management Service shall log, for each ECS host, incoming access attempts via: a. telnet b. FTP c. rlogin d. finger.
			C-MSS-76000	A	The MSS accountability management service shall be capable of retrieving user activity data (user id, type of user activity, data items used (browsed, searched, or ordered), and date/time of activity) from records generated by the SDPS Data Server, Data Processing, and Client subsystems.
			C-CSS-21105	A	The CSS Security Service shall notify the MSS Management Agent Service upon a predetermined number of unsuccessful login attempts.
			C-CSS-21190	A	The CSS Security service shall provide an API to receive and decrypt the data passing between processes at the following three levels: a. connect level b. request level c. packet level

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-CSS-21210	A	The CSS Security service shall provide the capability to log audit information into security logs whenever authentication and authorization services are used. The audit information will contain the following: a. Date and time of the event b. User name c. Type of event d. Success or failure of the event e. Origin of the request
			S-DSS-20500	A	The STMGT CI shall report unauthorized attempts to access archived data when detected to operations staff.
EOSD2510#B	ECS elements shall maintain an audit trail of: a. All accesses to the element security controlled data b. Users/processes/elements requesting access to element security controlled data c. Data access/manipulation operations performed on security controlled data d. Date and time of access to security controlled data e. Unsuccessful access attempt to the element security controlled data by unauthorized users/elements/processes f. Detected computer system viruses and worms g. Actions taken to contain or destroy a virus		C-MSS-90290	A	The DBMS shall provide an audit trail of chronological activities in the database.
			C-MSS-76030	A	The MSS Accountability Management Service shall log, for each ECS host, incoming access attempts via: a. telnet b. FTP c. rlogin d. finger.
			C-MSS-76000	A	The MSS accountability management service shall be capable of retrieving user activity data (user id, type of user activity, data items used (browsed, searched, or ordered), and date/time of activity) from records generated by the SDPS Data Server, Data Processing, and Client subsystems.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-CSS-21105	A	The CSS Security Service shall notify the MSS Management Agent Service upon a predetermined number of unsuccessful login attempts.
			C-CSS-21190	A	The CSS Security service shall provide an API to receive and decrypt the data passing between processes at the following three levels: a. connect level b. request level c. packet level
			C-CSS-21210	A	The CSS Security service shall provide the capability to log audit information into security logs whenever authentication and authorization services are used. The audit information will contain the following: a. Date and time of the event b. User name c. Type of event d. Success or failure of the event e. Origin of the request
			F-FOS-00425	B	The EOC shall maintain an audit trail of: a. All accesses to the element security controlled data b. Users/processes/elements requesting access to element security controlled data c. Data access/manipulation operations performed on security controlled data d. Date and time of access to security controlled data e. Unsuccessful access attempt to the element security controlled data by unauthorized users/elements/processes f. Detected computer system viruses and worms g. Actions taken to contain or destroy a virus
			S-DSS-20500	A	The STMGT CI shall report unauthorized attempts to access archived data when detected to operations staff.
EOSD2550#A	The ECS elements shall limit use of master passwords or use of a single password for large organizations requiring access to a mix of security controlled and non-sensitive data.		F-FOS-00430	A	The FOS shall require a unique user identification and password for each individual user.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-70300	IR1	The MSS site Security Management Application Service shall have the capability to perform the following types of security tests: a. password auditing b. file system integrity checking c. auditing of user privileges d. auditing of resource access control information
EOSD2550#B	The ECS elements shall limit use of master passwords or use of a single password for large organizations requiring access to a mix of security controlled and non-sensitive data.		F-FOS-00430	A	The FOS shall require a unique user identification and password for each individual user.
			C-MSS-70300	IR1	The MSS site Security Management Application Service shall have the capability to perform the following types of security tests: a. password auditing b. file system integrity checking c. auditing of user privileges d. auditing of resource access control information
EOSD2555#B	ECS shall maintain confidentiality of user product request and accounts.		C-MSS-90030	A	The DBMS shall provide security access control based upon userid, role and privleges for the following: a. database b. database object c. database operations
EOSD2620#A	ECS elements shall disconnect a user/element after a predetermined number of unsuccessful attempts to access data.		C-CSS-21105	A	The CSS Security Service shall notify the MSS Management Agent Service upon a predetermined number of unsuccessful login attempts.
EOSD2620#B	ECS elements shall disconnect a user/element after a predetermined number of unsuccessful attempts to access data.		C-CSS-21105	A	The CSS Security Service shall notify the MSS Management Agent Service upon a predetermined number of unsuccessful login attempts.
EOSD2640#A	ECS elements shall relinquish a connection between the element and a user when the user has not been active for a configurable period of time.		C-CSS-21040	A	The CSS Security service shall provide an API to limit the time after which a login context will expire.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
EOSD2640#B	ECS elements shall relinquish a connection between the element and a user when the user has not been active for a configurable period of time.		C-CSS-21040	A	The CSS Security service shall provide an API to limit the time after which a login context will expire.
EOSD2650#A	ECS elements shall report detected security violations to the SMC.		C-MSS-70400	A	The MSS EMC Security Management Application Service shall have the capability to receive notifications of security events from the site Security Management Application Services.
			C-MSS-70430	A	The MSS site Security Management Application Service shall provide the capability to designate a user or a group of users to receive a notification upon the detection of an intrusion, virus or worm.
			F-FOS-00435	A	The EOC shall report detected security violations to the SMC.
			F-FOS-00445	A	The EOC shall report all detected computer viruses and actions taken to the SMC.
EOSD2650#B	ECS elements shall report detected security violations to the SMC.		C-MSS-70400	A	The MSS EMC Security Management Application Service shall have the capability to receive notifications of security events from the site Security Management Application Services.
			C-MSS-70430	A	The MSS site Security Management Application Service shall provide the capability to designate a user or a group of users to receive a notification upon the detection of an intrusion, virus or worm.
			F-FOS-00435	A	The EOC shall report detected security violations to the SMC.
			F-FOS-00445	A	The EOC shall report all detected computer viruses and actions taken to the SMC.
			F-FOS-00490	B	The EOC shall provide for security safeguards to cover unscheduled system shutdown (aborts) and subsequent restarts, as well as for scheduled system shutdown and operational startup. $Ao = \frac{MTBM}{MTBM + MDT+ST}$ MTBM : Mean Time Between Maintenance (defined in the glossary) MDT: Mean Down Time (defined in the glossary) ST: Standby Time (or switchover time - defined in the glossary)

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
EOSD2660#A	ECS elements shall at all times maintain and comply with the security directives issued by the SMC.		C-MSS-70310	A	The MSS site Security Management Application Service shall have the capability to perform security testing on a periodic and on an interactive basis.
			C-MSS-70320	A	The MSS site Security Management Application Service shall have the capability to send the results of the tests to the EMC Security Management Application Service.
			C-MSS-70330	A	The MSS EMC Security Management Application Service shall have the capability to request, support, coordinate and maintain security testing for sites.
			C-MSS-70340	A	The MSS EMC Security Management Application Service shall have the capability to request security testing of the sites on a scheduled and an interactive basis
			C-MSS-70350	A	The MSS EMC Security Management Application Service shall have the capability to receive the results of security tests performed at the sites.
			C-MSS-70300	IR1	The MSS site Security Management Application Service shall have the capability to perform the following types of security tests: a. password auditing b. file system integrity checking c. auditing of user privileges d. auditing of resource access control information
EOSD2660#B	ECS elements shall at all times maintain and comply with the security directives issued by the SMC.		C-MSS-70310	A	The MSS site Security Management Application Service shall have the capability to perform security testing on a periodic and on an interactive basis.
			C-MSS-70320	A	The MSS site Security Management Application Service shall have the capability to send the results of the tests to the EMC Security Management Application Service.
			C-MSS-70330	A	The MSS EMC Security Management Application Service shall have the capability to request, support, coordinate and maintain security testing for sites.
			C-MSS-70340	A	The MSS EMC Security Management Application Service shall have the capability to request security testing of the sites on a scheduled and an interactive basis

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-70350	A	The MSS EMC Security Management Application Service shall have the capability to receive the results of security tests performed at the sites.
			C-MSS-70300	IR1	The MSS site Security Management Application Service shall have the capability to perform the following types of security tests: a. password auditing b. file system integrity checking c. auditing of user privileges d. auditing of resource access control information
EOSD2710#A	ECS elements shall report all detected computer viruses and actions taken to the SMC.		C-MSS-70400	A	The MSS EMC Security Management Application Service shall have the capability to receive notifications of security events from the site Security Management Application Services.
			C-MSS-70430	A	The MSS site Security Management Application Service shall provide the capability to designate a user or a group of users to receive a notification upon the detection of an intrusion, virus or worm.
			C-MSS-70440	A	The MSS site Security Management Application Service shall provide the capability to notify designated M&O staff(s) upon the detection of an intrusion, virus or worm.
EOSD2710#B	ECS elements shall report all detected computer viruses and actions taken to the SMC.		C-MSS-70400	A	The MSS EMC Security Management Application Service shall have the capability to receive notifications of security events from the site Security Management Application Services.
			C-MSS-70430	A	The MSS site Security Management Application Service shall provide the capability to designate a user or a group of users to receive a notification upon the detection of an intrusion, virus or worm.
			C-MSS-70440	A	The MSS site Security Management Application Service shall provide the capability to notify designated M&O staff(s) upon the detection of an intrusion, virus or worm.
EOSD2990#A	The ECS elements shall support the recovery from a system failure due to a loss in the integrity of the ECS data or a catastrophic violation of the security system.	A: at each DAAC as activated by the release recovery of higher level products by reprocessing of Level 0 if needed.	C-MSS-90240	A	The DBMS shall provide for automatic database recovery including a means to: a. automatically restore undamaged portions of a database and recover work in progress after a system or component failure b. achieve dynamic backout of database modifications, performed by a failing transaction, that does not affect separate, concurrent tasks

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-70500	A	The MSS EMC Security Management Application Service shall have the capability to coordinate with the site Security Management Application Services, via directives and instructions, the recovery from security compromises.
			C-MSS-70510	A	The MSS site Security Management Application Service shall, upon the detection of a compromise, isolate the compromised input I/O, and the compromised area's output I/O until the compromise has been eliminated.
			C-MSS-70530	A	The MSS EMC Security Management Application Service shall coordinate, as necessary via directives and instructions, the recovery from security events reported from a site.
			S-DPS-21540	A	The PRONG CI shall destage all output data generated by a PGE to the SDSRV CI. (SEE Data Staging and Destaging Reqs for more details).
			S-DPS-21560	A	If the resource fails during the execution of a PGE, the PRONG CI shall be capable of initiating the execution of the PGE without having to regenerate that PGE's input data.
			S-DPS-21570	A	If a PGE fails abnormally during execution, the PRONG CI shall be capable of initiating the execution of the PGE without having to regenerate that PGE's input data.
			C-MSS-70520	IR1	The MSS EMC Security Management Application Service shall provide office automation support tools to enable the generation of directives and instructions for recovery from detected security events.
EOSD2990#B	The ECS elements shall support the recovery from a system failure due to a loss in the integrity of the ECS data or a catastrophic violation of the security system.	B: all DAACs	C-MSS-90240	A	The DBMS shall provide for automatic database recovery including a means to: a. automatically restore undamaged portions of a database and recover work in progress after a system or component failure b. achieve dynamic backout of database modifications, performed by a failing transaction, that does not affect separate, concurrent tasks
			C-MSS-70500	A	The MSS EMC Security Management Application Service shall have the capability to coordinate with the site Security Management Application Services, via directives and instructions, the recovery from security compromises.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-70510	A	The MSS site Security Management Application Service shall, upon the detection of a compromise, isolate the compromised input I/O, and the compromised area's output I/O until the compromise has been eliminated.
			C-MSS-70530	A	The MSS EMC Security Management Application Service shall coordinate, as necessary via directives and instructions, the recovery from security events reported from a site.
			S-INS-60150	IR1	The ICLHW CI shall have provision for Initialization, Recovery, and an orderly shutdown.
			S-DPS-21540	A	The PRONG CI shall destage all output data generated by a PGE to the SDSRV CI. (SEE Data Staging and Destaging Reqs for more details).
			S-DPS-21560	A	If the resource fails during the execution of a PGE, the PRONG CI shall be capable of initiating the execution of the PGE without having to regenerate that PGE's input data.
			S-DPS-21570	A	If a PGE fails abnormally during execution, the PRONG CI shall be capable of initiating the execution of the PGE without having to regenerate that PGE's input data.
			C-MSS-70520	IR1	The MSS EMC Security Management Application Service shall provide office automation support tools to enable the generation of directives and instructions for recovery from detected security events.
			C-CSS-29050	B	The CSS Transaction Processing Service shall provide for the integrity of data by means of component rollback in the event of system failure.
			C-CSS-29080	B	The CSS Transaction Processing Service shall provide the capability of recovering from multiple failures without loss of data.
EOSD3000#A	The ECS shall provide for security safeguards to cover unscheduled system shutdown (aborts) and subsequent restarts, as well as for scheduled system shutdown and operational startup.	for each DAAC as applicable to DAAC activation	C-MSS-60520	A	The MSS Fault Management Application Service shall provide the capability to allow the specification and execution of action routines in response to the notification of a fault.
			C-MSS-60500	IR1	The MSS EMC Fault Management Application Service shall coordinate the recovery from conditions of performance degradation and faults with the sites and external network service providers.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
EOSD3000#B	The ECS shall provide for security safeguards to cover unscheduled system shutdown (aborts) and subsequent restarts, as well as for scheduled system shutdown and operational startup.	for each DAAC as applicable to DAAC activation	C-MSS-60520	A	The MSS Fault Management Application Service shall provide the capability to allow the specification and execution of action routines in response to the notification of a fault.
			C-CSS-24070	A	The CSS Lifecycle Service shall provide a way to shutdown an appilication process.
			C-CSS-24100	A	The CSS Lifecycle Service shall provide a way for server appilications to construct an object (if it is not already running) and dispatch the incoming call to the object.
			C-CSS-24080	A	The CSS Lifecycle Service shall provide a way to suspend an appilication process.
			C-CSS-24090	A	The CSS Lifecycle Service shall provide a way to resume a suspend appilication process.
			C-CSS-10580	B	The CSS DCCI shall accept system administration information request from the Operator.
			C-CSS-10590	B	The CSS DCCI shall provide system administration information to the Operator .
			C-CSS-24010	B	The CSS Lifecycle Service shall provide a generic instantiation capability that creates a new object for a client.
			C-CSS-24020	B	The CSS Lifecycle Service shall provide an API that accepts state initialization information.
			C-CSS-24030	B	The CSS Lifecycle Service shall provide an API that accepts resource preference information.
			C-CSS-24040	B	The CSS Lifecycle Service shall provide an API that returns an object invocation handle.
			C-CSS-24050	B	The CSS Lifecycle Service shall ensure that a server is available to service a user request.
			C-CSS-24060	B	The CSS Lifecycle Service shall act as an intermediary during the client server connection phase.
			C-MSS-60500	IR1	The MSS EMC Fault Management Application Service shall coordinate the recovery from conditions of performance degradation and faults with the sites and external network service providers.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
EOSD3200#A	A minimum of one backup which is maintained in a separate physical location (i.e., different building) shall be maintained for ECS software and key data items (including security audit trails and logs).		C-MSS-90180	A	The DBMS shall provide the following database backup capabilities: a. Entire database b. Incremental data c. User specified database items.
			C-MSS-90190	A	The DBMS shall provide capabilities for specifying frequency, time, and type of backups.
			C-HRD-28005	A	The CSS-DCHCI Local Communications Server shall maintain one backup of all software and key data items in a separate physical location.
			C-HRD-18000	IR1	The MSS-MHCI Enterprise Monitoring Server shall maintain one backup of all software and key data items in a separate physical location.
			C-HRD-18005	IR1	The MSS-MHCI Local Management Server shall maintain one backup of all software and key data items in a separate physical location.
			C-HRD-28000	IR1	The CSS-DCHCI Enterprise Communications Server shall maintain one backup of all software and key data items in a separate physical location.
EOSD3200#B	A minimum of one backup which is maintained in a separate physical location (i.e., different building) shall be maintained for ECS software and key data items (including security audit trails and logs).		C-MSS-90180	A	The DBMS shall provide the following database backup capabilities: a. Entire database b. Incremental data c. User specified database items.
			C-MSS-90190	A	The DBMS shall provide capabilities for specifying frequency, time, and type of backups.
			C-CSS-03900	B	The CSS-DCHW CI Enterprise Communications Server shall maintain one backup of all software and key data items in a separate physical location.
			C-CSS-03910	B	The CSS-DCHW CI Local Communications Server shall maintain one backup of all software and key data items in a separate physical location.
			C-MSS-04000	B	The MSS-MHW CI Enterprise Monitoring Server shall maintain one backup of all software and key data items in a separate physical location.
			C-MSS-04010	B	The MSS-MHW CI Local Management Server shall maintain one backup of all software and key data items in a separate physical location.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
EOSD3200#Ir1	A minimum of one backup which is maintained in a separate physical location (i.e., different building) shall be maintained for ECS software.		C-HRD-18000	IR1	The MSS-MHCI Enterprise Monitoring Server shall maintain one backup of all software and key data items in a separate physical location.
			C-HRD-18005	IR1	The MSS-MHCI Local Management Server shall maintain one backup of all software and key data items in a separate physical location.
			C-HRD-28000	IR1	The CSS-DCHCI Enterprise Communications Server shall maintain one backup of all software and key data items in a separate physical location.
EOSD3220#A	All media shall be handled and stored in protected areas with environmental and accounting procedures applied.				
EOSD3220#B	All media shall be handled and stored in protected areas with environmental and accounting procedures applied.		C-MSS-75060	B	The MSS accountability management service shall provide the capability to maintain a system profile inventory database of ECS software and non product data.
			C-MSS-75070	B	The system profile inventory database shall store the following information for each inventory entry: Data ID, Data purpose, Data location, Data classification and Data priority.
EOSD3490#A	Reliability statistics for ECS shall be collected and monitored using the Mean Time Between Maintenance (MTBM) for each component and operational capability.	A: applicable DAACs	C-MSS-66135	A	The MSS Performance Management Application Service shall have the capability to calculate the following statistics for the purpose of supporting RMA analysis for managed objects: a. Mean Down time (MDT) b. Mean Time Between Maintenance (MTBM) 1. Mean Time Between Preventive Maintenance (MTBPM) 2. Mean Time Between Corrective Maintenance (MTBCM) c. Mean Time to Repair (MTTR)

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
EOSD3490#B	Reliability statistics for ECS shall be collected and monitored using the Mean Time Between Maintenance (MTBM) for each component and operational capability.	B: all DAACs	C-MSS-66135	A	The MSS Performance Management Application Service shall have the capability to calculate the following statistics for the purpose of supporting RMA analysis for managed objects: a. Mean Down time (MDT) b. Mean Time Between Maintenance (MTBM) 1. Mean Time Between Preventive Maintenance (MTBPM) 2. Mean Time Between Corrective Maintenance (MTBCM) c. Mean Time to Repair (MTTR)
EOSD3492#A	RMA data shall be maintained in a repository accessible for logistics analysis and other purposes.		C-MSS-18070	A	The MSS Management Data Access Service shall provide the capability to selectively access management data.
			C-MSS-90080	A	The DBMS shall support mathematical operations to generate statistics from management data to include: a. average b. maximum c. minimum d. standard deviation e. sum f. count g. variance
			C-MSS-18270	A	The MSS Management Data Access Service shall have the capability to schedule the archiving of log files at the site.
			C-MSS-18280	A	The MSS Management Data Access Service shall have the capability to schedule the transfer of management data at the sites to the SMC.
			C-MSS-18350	A	The MSS Management Data Access Service shall provide the capability for an application to load log files into the management database at the site
			C-MSS-66137	A	The MSS Performance Management Application Service shall retain the calculated RMA statistics in a repository accessible for further analysis by the M&O Staff.
			C-MSS-18060	A	The Management Data Access Service shall provide the capability for an application to access management data.
			C-MSS-18050	A	The MSS Management Data Access Service's shall utilize CSS Services to access/transfer management data.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
EOSD3492#B	RMA data shall be maintained in a repository accessible for logistics analysis and other purposes.		C-MSS-18070	A	The MSS Management Data Access Service shall provide the capability to selectively access management data.
			C-MSS-90080	A	The DBMS shall support mathematical operations to generate statistics from management data to include: a. average b. maximum c. minimum d. standard deviation e. sum f. count g. variance
			C-MSS-18270	A	The MSS Management Data Access Service shall have the capability to schedule the archiving of log files at the site.
			C-MSS-18280	A	The MSS Management Data Access Service shall have the capability to schedule the transfer of management data at the sites to the SMC.
			C-MSS-18350	A	The MSS Management Data Access Service shall provide the capability for an application to load log files into the management database at the site
			C-MSS-66137	A	The MSS Performance Management Application Service shall retain the calculated RMA statistics in a repository accessible for further analysis by the M&O Staff.
			C-MSS-18060	A	The Management Data Access Service shall provide the capability for an application to access management data.
			C-MSS-18360	B	The MSS Management Data Access Service shall provide the capability for the M&O staff to load log files into the management database at the site.
			C-MSS-18050	A	The MSS Management Data Access Service's shall utilize CSS Services to access/transfer management data.
EOSD3500#A	The ECS RMA Program shall adhere to GSFC 420-05-03, Performance Assurance Requirements for the EOSDIS.	Planned in PAIP This analysis presented in CDRLs 515, 516, 517, 518			

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
EOSD3500#B	The ECS RMA Program shall adhere to GSFC 420-05-03, Performance Assurance Requirements for the EOSDIS.	Planned in PAIP This analysis presented in CDRLs 515, 516, 517, 518	C-MSS-00010	A	The MSS services at the SMC shall be configured to support the SMC function of Gathering and Disseminating System Management Information's Availability requirement of .998 and a mean down time of 20 minutes or less for critical services during times of staffed operation.
EOSD3510#A	Reliability predictions shall be calculated in accordance with the parts count analysis method, Appendix A, of MIL-HDBK-217F, Reliability Prediction of Electronic Equipment.	Planned in PAIP. This analysis presented in CDRLS515, 516, 517, 518.			
EOSD3510#B	Reliability predictions shall be calculated in accordance with the parts count analysis method, Appendix A, of MIL-HDBK-217F, Reliability Prediction of Electronic Equipment.	Planned in PAIP. This analysis presented in CDRLS 515, 516, 517, 518.			
EOSD3600#A	Maintainability shall be predicted in accordance with MIL-HDBK-472, Maintainability Prediction, Procedure IV.	By analysis presented in CDRL 518			
EOSD3600#B	Maintainability shall be predicted in accordance with MIL-HDBK-472, Maintainability Prediction, Procedure IV.	By analysis presented in CDRL 518			
EOSD3610#A	The Maintainability Status Report shall be based on MIL-STD-470A, Maintainability Program for Systems and Equipment, Task 104 and shall include any changes in the MTBM predictions.	Compliance described by analysis presented in CDRL 518	C-MSS-66137	A	The MSS Performance Management Application Service shall retain the calculated RMA statistics in a repository accessible for further analysis by the M&O Staff.
			C-MSS-66135	A	The MSS Performance Management Application Service shall have the capability to calculate the following statistics for the purpose of supporting RMA analysis for managed objects: a. Mean Down time (MDT) b. Mean Time Between Maintenance (MTBM) 1. Mean Time Between Preventive Maintenance (MTBPM) 2. Mean Time Between Corrective Maintenance (MTBCM) c. Mean Time to Repair (MTTR)

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
EOSD3610#B	The Maintainability Status Report shall be based on MIL-STD-470A, Maintainability Program for Systems and Equipment, Task 104 and shall include any changes in the MTBM predictions.	Compliance described by analysis presented in CDRL 518	C-MSS-66137	A	The MSS Performance Management Application Service shall retain the calculated RMA statistics in a repository accessible for further analysis by the M&O Staff.
			C-MSS-66135	A	The MSS Performance Management Application Service shall have the capability to calculate the following statistics for the purpose of supporting RMA analysis for managed objects: a. Mean Down time (MDT) b. Mean Time Between Maintenance (MTBM) 1. Mean Time Between Preventive Maintenance (MTBPM) 2. Mean Time Between Corrective Maintenance (MTBCM) c. Mean Time to Repair (MTTR)
EOSD3615#A	The Maintainability Status Report shall also include data on items specified for maintainability reporting in GSFC 420-05-03.	Compliance described by analysis presented in CDRL 518	C-MSS-66137	A	The MSS Performance Management Application Service shall retain the calculated RMA statistics in a repository accessible for further analysis by the M&O Staff.
			C-MSS-66135	A	The MSS Performance Management Application Service shall have the capability to calculate the following statistics for the purpose of supporting RMA analysis for managed objects: a. Mean Down time (MDT) b. Mean Time Between Maintenance (MTBM) 1. Mean Time Between Preventive Maintenance (MTBPM) 2. Mean Time Between Corrective Maintenance (MTBCM) c. Mean Time to Repair (MTTR)
EOSD3615#B	The Maintainability Status Report shall also include data on items specified for maintainability reporting in GSFC 420-05-03.	Compliance described by analysis presented in CDRL 518	C-MSS-66137	A	The MSS Performance Management Application Service shall retain the calculated RMA statistics in a repository accessible for further analysis by the M&O Staff.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-66135	A	The MSS Performance Management Application Service shall have the capability to calculate the following statistics for the purpose of supporting RMA analysis for managed objects: a. Mean Down time (MDT) b. Mean Time Between Maintenance (MTBM) 1. Mean Time Between Preventive Maintenance (MTBPM) 2. Mean Time Between Corrective Maintenance (MTBCM) c. Mean Time to Repair (MTTR)
EOSD3620#A	ECS shall predict and periodically assess maintainability by measuring the actual	M&O responsibility A: Applicable DAACs	C-MSS-66135	A	The MSS Performance Management Application Service shall have the capability to calculate the following statistics for the purpose of supporting RMA analysis for managed objects: a. Mean Down time (MDT) b. Mean Time Between Maintenance (MTBM) 1. Mean Time Between Preventive Maintenance (MTBPM) 2. Mean Time Between Corrective Maintenance (MTBCM) c. Mean Time to Repair (MTTR)
EOSD3620#B	ECS shall predict and periodically assess maintainability by measuring the actual MDT and comparing to the required MDT.	B: All DAACs/external systems.	C-MSS-66135	A	The MSS Performance Management Application Service shall have the capability to calculate the following statistics for the purpose of supporting RMA analysis for managed objects: a. Mean Down time (MDT) b. Mean Time Between Maintenance (MTBM) 1. Mean Time Between Preventive Maintenance (MTBPM) 2. Mean Time Between Corrective Maintenance (MTBCM) c. Mean Time to Repair (MTTR)
EOSD3625#A	For ECS functions with a backup capability, ECS shall use switchover time to the backup capability in measuring maintainability, rather than down time, when the component goes down.	Compliance described by analysis presented in CDRL 511	C-MSS-66135	A	The MSS Performance Management Application Service shall have the capability to calculate the following statistics for the purpose of supporting RMA analysis for managed objects: a. Mean Down time (MDT) b. Mean Time Between Maintenance (MTBM) 1. Mean Time Between Preventive Maintenance (MTBPM) 2. Mean Time Between Corrective Maintenance (MTBCM) c. Mean Time to Repair (MTTR)

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
EOSD3625#B	For ECS functions with a backup capability, ECS shall use switchover time to capability in measuring maintainability, rather than down time, when the component goes down.	Compliance described by analysis presented in CDRL 511	C-MSS-66135	A	The MSS Performance Management Application Service shall have the capability to calculate the following statistics for the purpose of supporting RMA analysis for managed objects: a. Mean Down time (MDT) b. Mean Time Between Maintenance (MTBM) 1. Mean Time Between Preventive Maintenance (MTBPM) 2. Mean Time Between Corrective Maintenance (MTBCM) c. Mean Time to Repair (MTTR)
EOSD3630#A	The maximum down time shall not exceed twice the required MDT in 99 percent of failure occurrences.	A: applicable DAACs	C-CSS-02070	A	The maximum down time of the CSS-DCHCI shall not exceed twice the required MDT in 99 percent of failure occurrences.
			C-ISS-04165	A	The maximum down time of the ISS-INHCI shall not exceed twice the required MDT in 99 percent of failure occurrences.
			S-DMS-60420	A	The maximum down time of the DMGHW CI shall not exceed twice the required MDT in 99 percent of failure occurrences.
			S-INS-60326	A	The maximum down time of the ICLHW CI shall not exceed twice the required MDT in 99 percent of failure occurrences.
			S-DSS-02047	A	The maximum down time of the ACMHW CI shall not exceed twice the required MDT in 99 percent of failure occurrences.
			S-DSS-31020	A	The maximum down time of the DIPHW CI shall not exceed twice the required MDT in 99 percent of failure occurrences.
			S-DSS-70090	A	The maximum down time of the WKSHW CI shall not exceed twice the required MDT in 99 percent of failure occurrences.
			S-DSS-21830	A	The maximum down time of the DRPHW CI shall not exceed twice the required MDT in 99 percent of failure occurrences.
			S-DPS-60535	A	The maximum down time of the SPRHW CI shall not exceed twice the required MDT in 99 percent of failure occurrences.
			S-DPS-70090	A	The maximum down time of the AITHW CI shall not exceed twice the required MDT in 99 percent of failure occurrences.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DPS-80025	A	The maximum down time of the AQAHW CI shall not exceed twice the required MDT in 99 percent of failure occurrences.
			S-PLS-60200	A	The maximum down time of the PLNHW CI shall not exceed twice the required MDT in 99 percent of failure occurrences.
			C-MSS-02070	A	The maximum down time of the MSS-MHCI shall not exceed twice the required MDT in 99 percent of failure occurrences.
EOSD3630#B	The maximum down time shall not exceed twice the required MDT in 99 percent of failure occurrences.	B: All DAACs/External Systems	C-CSS-02070	A	The maximum down time of the CSS-DCHCI shall not exceed twice the required MDT in 99 percent of failure occurrences.
			C-ISS-04165	A	The maximum down time of the ISS-INHCI shall not exceed twice the required MDT in 99 percent of failure occurrences.
			S-DMS-60420	A	The maximum down time of the DMGHW CI shall not exceed twice the required MDT in 99 percent of failure occurrences.
			S-INS-60326	A	The maximum down time of the ICLHW CI shall not exceed twice the required MDT in 99 percent of failure occurrences.
			S-DSS-02047	A	The maximum down time of the ACMHW CI shall not exceed twice the required MDT in 99 percent of failure occurrences.
			S-DSS-31020	A	The maximum down time of the DIPHW CI shall not exceed twice the required MDT in 99 percent of failure occurrences.
			S-DSS-70090	A	The maximum down time of the WKSHW CI shall not exceed twice the required MDT in 99 percent of failure occurrences.
			S-DSS-21830	A	The maximum down time of the DRPHW CI shall not exceed twice the required MDT in 99 percent of failure occurrences.
			S-DPS-60535	A	The maximum down time of the SPRHW CI shall not exceed twice the required MDT in 99 percent of failure occurrences.
			S-DPS-70090	A	The maximum down time of the AITHW CI shall not exceed twice the required MDT in 99 percent of failure occurrences.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DPS-80025	A	The maximum down time of the AQAHW CI shall not exceed twice the required MDT in 99 percent of failure occurrences.
			S-PLS-60200	A	The maximum down time of the PLNHW CI shall not exceed twice the required MDT in 99 percent of failure occurrences.
			C-MSS-02070	A	The maximum down time of the MSS-MHCI shall not exceed twice the required MDT in 99 percent of failure occurrences.
EOSD3700#A	ECS functions shall have an operational availability of 0.96 at a minimum (.998 design goal) and an MDT of four (4) hours or less (1.5 hour design goal), unless otherwise specified. The above requirement covers equipment including: a. "Non-critical" equipment configured with the critical equipment supporting the functional capabilities in the requirements. b. Equipment providing other functionality not explicitly stated in the RMA requirements that follow.	A: applicable DAACs - Does not apply to data processing function. Product generation is applicable to EOSD4010 and EOSD4020.	S-DPS-60490	A	The SPRHW CI shall be capable of supporting system development without impact to normal operations.
			S-DPS-60500	A	The SPRHW CI shall be capable of supporting science software test without impact to normal operations.
			S-DPS-60525	A	SPRHW CI functions shall have an operational availability of .96 as a minimum and Mean Down Time of < 4 hours during times of staffed operation.
			S-DPS-70080	A	AITHW CI functions shall have an operational availability of .96 as a minimum and Mean Down Time of < 4 hours during times of staffed operation.
			C-ISS-04055	A	The EOC Support LAN shall have an operational availability of at least 0.96 and shall have a mean down time of no greater than 4 hours during times of staffed operation, unless otherwise specified.
			S-DPS-80011	A	The AQAHW CI functions shall have an operational availability of .96 as a minimum and a mean down time of <4 hours during times of staffed operation.
			S-PLS-60420	A	PLNHW CI functions shall have an operational availability of .96 as a minimum and Mean Down Time of < 4 hours during times of staffed operations.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
EOSD3700#B	ECS functions shall have an operational availability of 0.96 at a minimum (.998 design goal) and an MDT of four (4) hours or less (1.5 hour design goal), unless otherwise specified. The above requirement covers equipment including: a. "Non-critical" equipment configured with the critical equipment supporting the functional capabilities in the requirements. b. Equipment providing other functionality not explicitly stated in the RMA requirements that follow.	B: EOC, SMC, and all DAACs. Does not apply to data processing function. Product generation is applicable to EOSD4010 and EOSD4020.	F-FOS-00500	B	FOS functions shall have an operational availability of 0.96 at a minimum (.998 design goal) and an MDT of four (4) hours or less (1.5 hour design goal), unless otherwise specified.
			S-DPS-60490	A	The SPRHW CI shall be capable of supporting system development without impact to normal operations.
			S-DPS-60500	A	The SPRHW CI shall be capable of supporting science software test without impact to normal operations.
			S-DPS-60525	A	SPRHW CI functions shall have an operational availability of .96 as a minimum and Mean Down Time of < 4 hours during times of staffed operation.
			S-DPS-70080	A	AITHW CI functions shall have an operational availability of .96 as a minimum and Mean Down Time of < 4 hours during times of staffed operation.
			C-ISS-04055	A	The EOC Support LAN shall have an operational availability of at least 0.96 and shall have a mean down time of no greater than 4 hours during times of staffed operation, unless otherwise specified.
			S-DPS-80011	A	The AQAHW CI functions shall have an operational availability of .96 as a minimum and a mean down time of <4 hours during times of staffed operation.
			S-PLS-60420	A	PLNHW CI functions shall have an operational availability of .96 as a minimum and Mean Down Time of < 4 hours during times of staffed operations.
EOSD3710#A	The ECS shall have no single point of failure for functions associated with real-time operations of the spacecraft and instruments.		C-ISS-04040	A	The EOC Operational LAN shall have no single point of failure for critical real-time functions.
EOSD3710#B	The ECS shall have no single point of failure for functions associated with real-time operations of the spacecraft and instruments.		F-FOS-00510	B	The EOC shall have no single point of failure for functions associated with real-time operations of the spacecraft and instruments.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			F-RMS-02010	B	The EOC shall process an EOC operator request to initiate the transfer of spacecraft control from one set of hardware and software components to another in order to work around a fault or anomaly.
			F-RMS-02020	B	The EOC shall correct a failure condition with a redundant component within one minute of operator request.
			C-ISS-04040	A	The EOC Operational LAN shall have no single point of failure for critical real-time functions.
EOSD3800#A	The FOS shall have an operational availability of 0.9998 at a minimum (.99997 design goal) and an MDT of one (1) minute or less (0.5 minute design goal) for critical real-time functions that support: a. Launch b. Early orbit checkout c. Disposal d. Orbit adjustment e. Anomaly investigation f. Recovery from safe mode g. Routine real-time commanding and associated monitoring for spacecraft and instrument health and safety		C-ISS-04050	A	The EOC Operational LAN shall be configured to support the FOS availability of .9998 and a mean down time of < 1 minute for critical real-time data during times of staffed operation.
EOSD3800#B	The FOS shall have an operational availability of 0.9998 at a minimum (.99997 design goal) and an MDT of one (1) minute or less (0.5 minute design goal) for critical real-time functions that support: a. Launch b. Early orbit checkout c. Disposal d. Orbit adjustment e. Anomaly investigation f. Recovery from safe mode g. Routine real-time commanding and associated monitoring for spacecraft and instrument health and safety		F-FOS-00505	B	The FOS shall have an operational availability of 0.9998 at a minimum (.99997 design goal) and an MDT of one (1) minute or less (0.5 minute design goal) for critical real-time functions that support: a. Launch b. Early orbit checkout c. Orbit adjustment d. Anomaly investigation e. Recovery from safe mode f. Routine real-time commanding and associated monitoring for spacecraft and instrument health and safety
			C-ISS-04050	A	The EOC Operational LAN shall be configured to support the FOS availability of .9998 and a mean down time of < 1 minute for critical real-time data during times of staffed operation.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
EOSD3810#A	The FOS shall have an operational availability of 0.99925 at a minimum (.99997 design goal) and an MDT of five (5) minutes or less (0.5 minute design goal) for non-critical real-time functions.		C-ISS-04170	A	The EOC Operational LAN shall be configured to support the FOS availability of .99925 and a mean down time of < 5 minutes for non-critical real-time data during times of staffed operation.
EOSD3810#B	The FOS shall have an operational availability of 0.99925 at a minimum (.99997 design goal) and an MDT of five (5) minutes or less (0.5 minute design goal) for non-critical real-time functions.		F-FOS-00515	B	The FOS shall have an operational availability of 0.99925 at a minimum (.99997 design goal) and an MDT of five (5) minutes or less (0.5 minute design goal) for non-critical real-time functions.
			C-ISS-04170	A	The EOC Operational LAN shall be configured to support the FOS availability of .99925 and a mean down time of < 5 minutes for non-critical real-time data during times of staffed operation.
EOSD3820#B	The FOS shall have an operational availability of 0.992 at a minimum (.99997 design goal) and an MDT of one (1) hour or less (0.5 minute design goal) for functions associated with Targets Of Opportunity (TOOs).		F-FOS-00520	B	The FOS shall have an operational availability of 0.992 at a minimum and a MDT of (1) hour or less for functions associated with Targets of Opportunity.
EOSD3900#A	The SDPS function of receiving science data shall have an operational availability of 0.999 at a minimum (.99995 design goal) and an MDT of two (2) hours or less (8 minutes design goal).	A: TRMM, L0 science data from SDPF (no product data);	C-CSS-02050	A	The CSS-DCHCI shall be configured to support the SDPS function of receiving science data's Availability requirement of .999 and Mean Down Time requirement of 2 hours or less during times of staffed operation.
			C-ISS-04060	A	The portion of the DAAC LAN supporting the SDPS function of receiving science data shall contribute to the function's operational availability of 0.999 at a minimum and a mean down time of two (2) hours or less during times of staffed operation.
			S-INS-60320	A	The ICLHW CI shall be configured to support the SDPS function of Receiving Science Data's Availability requirement of .999 and Mean Down Time requirement of < 2 hours during times of staffed operation.
EOSD3900#B	The SDPS function of receiving science data shall have an operational availability of 0.999 at a minimum (.99995 design goal) and an MDT of two (2) hours or less (8 minutes design goal).	B: L0 data	C-CSS-02050	A	The CSS-DCHCI shall be configured to support the SDPS function of receiving science data's Availability requirement of .999 and Mean Down Time requirement of 2 hours or less during times of staffed operation.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-ISS-04060	A	The portion of the DAAC LAN supporting the SDPS function of receiving science data shall contribute to the function's operational availability of 0.999 at a minimum and a mean down time of two (2) hours or less during times of staffed operation.
			S-INS-60320	A	The ICLHW CI shall be configured to support the SDPS function of Receiving Science Data's Availability requirement of .999 and Mean Down Time requirement of < 2 hours during times of staffed operation.
EOSD3910#A	The switchover time from the primary science data receipt capability to a backup capability shall be 15 minutes or less (10 minutes design goal).	A: SDPF (L0 data - no product data)	S-INS-60765	A	The ICLHW CI shall have a switchover time from the primary science data receipt capability to a backup capability of 15 minutes or less.
EOSD3910#B	The switchover time from the primary science data receipt capability to a backup capability shall be 15 minutes or less (10 minutes design goal).	B: All AM-1	S-INS-60765	A	The ICLHW CI shall have a switchover time from the primary science data receipt capability to a backup capability of 15 minutes or less.
EOSD3920#A	The SDPS function of archiving and distributing data shall have an operational availability of 0.98 at a minimum (.999999 design goal) and an MDT of two (2) hours or less (9 minutes design goal).	A: TRMM @ LaRC, MSFC, GSFC	C-MSS-02052	A	The MSS-MHCI shall be configured to support the SDPS function of Archiving and Distributing Data's Availability requirement of .98 and Mean Down Time requirement of < 2 hours during times of staffed operation.
			C-CSS-02052	A	The CSS-DCHCI shall be configured to support the SDPS function of Archiving and Distributing Data's Availability requirement of .98 and Mean Down Time requirement of < 2 hours during times of staffed operation.
			S-DSS-02040	A	The ACMHW CI shall be configured to support the SDPS function of Archiving and Distributing Data's Availability requirement of .98 and Mean Down Time requirement of < 2 hours during times of staffed operation.
			S-DSS-21800	A	The DRPHW CI shall be configured to support the SDPS function of Archiving and Distributing Data's Availability requirement of .98 and a Mean Down Time of < 2 hrs. during times of staffed operation.
			S-DSS-31000	A	The DIPHW CI shall be configured to support the SDPS function of Archiving and Distributing Data's Availability requirement of .98 and a Mean Down Time requirement of < 2 hrs. during times of staffed operation. (This applies to distributing data and ingesting hard media.)

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DSS-70075	A	The WKSHW CI shall be configured to support the SDPS function of Archiving and DIstributing Data's Availability requirement of .98 and Mean Down Time requirement of < 2 hours during times of staffed operation.
EOSD3920#B	The SDPS function of archiving and distributing data shall have an operational availability of 0.98 at a minimum (.999999 design goal) and an MDT of two (2) hours or less (9 minutes design goal).	B: All DAACs	C-MSS-02052	A	The MSS-MHCI shall be configured to support the SDPS function of Archiving and Distributing Data's Availability requirement of .98 and Mean Down Time requirement of < 2 hours during times of staffed operation.
			C-CSS-02052	A	The CSS-DCHCI shall be configured to support the SDPS function of Archiving and Distributing Data's Availability requirement of .98 and Mean Down Time requirement of < 2 hours during times of staffed operation.
			S-DSS-02040	A	The ACMHW CI shall be configured to support the SDPS function of Archiving and Distributing Data's Availability requirement of .98 and Mean Down Time requirement of < 2 hours during times of staffed operation.
			S-DSS-21800	A	The DRPHW CI shall be configured to support the SDPS function of Archiving and Distributing Data's Availability requirement of .98 and a Mean Down Time of < 2 hrs. during times of staffed operation.
			S-DSS-31000	A	The DIPHW CI shall be configured to support the SDPS function of Archiving and Distributing Data's Availability requirement of .98 and a Mean Down Time requirement of < 2 hrs. during times of staffed operation. (This applies to distributing data and ingesting hard media.)
			S-DSS-70075	A	The WKSHW CI shall be configured to support the SDPS function of Archiving and DIstributing Data's Availability requirement of .98 and Mean Down Time requirement of < 2 hours during times of staffed operation.
EOSD3930#A	The user interfaces to Information Management System (IMS) services at individual Distributed Active Archive Center (DAAC) sites shall have an operational availability of 0.993 at a minimum (.9997 design goal) and an MDT of two (2) hours or less (1.6 hour design goal).	A: TRMM at applicable DAACs	C-MSS-02054	A	The MSS-MHCI shall be configured to support the SDPS function of User Interfaces to Client, Interoperability, Data Server, and Data Management (IMS) services at Individual DAAC Site's availability requirement of .993 and a mean down time requirement of < 2 hours during times of staffed operations.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-CSS-02054	A	The CSS-DCHCI shall be configured to support the SDPS function of User Interfaces to Client, Interoperability, Data Server, and Data Management (IMS) services at Individual DAAC Site's availability requirement of .993 and a mean down time requirement of < 2 hours during times of staffed operations.
			S-DMS-60360	A	The DMGHW CI shall be configured to support the SDPS function of User Interfaces to Client, Interoperability, Data Server, and Data Management (IMS) services at Individual DAAC Site's availability requirement of .993 and a mean down time requirement of < 2 hours during times of staffed operations.
			S-DSS-02041	A	The ACMHW CI shall be configured to support the SDPS function of User Interfaces to Client, Interoperability, Data Server, and Data Management (IMS) services at Individual DAAC Site's availability requirement of .993 and a mean down time requirement of < 2 hours during times of staffed operations.
			S-DSS-21820	A	The DRPHW CI shall be configured to support the SDPS function of User Interfaces to Client, Interoperability, Data Server, and Data Management (IMS) services at Individual DAAC Site's availability requirement of .993 and a mean down time requirement of < 2 hours during times of staffed operations.
EOSD3930#B	The user interfaces to Information Management System (IMS) services at individual Distributed Active Archive Center (DAAC) sites shall have an operational availability of 0.993 at a minimum (.9997 design goal) and an MDT of two (2) hours or less (1.6 hour design goal).	B: All DAACs	C-MSS-02054	A	The MSS-MHCI shall be configured to support the SDPS function of User Interfaces to Client, Interoperability, Data Server, and Data Management (IMS) services at Individual DAAC Site's availability requirement of .993 and a mean down time requirement of < 2 hours during times of staffed operations.
			C-CSS-02054	A	The CSS-DCHCI shall be configured to support the SDPS function of User Interfaces to Client, Interoperability, Data Server, and Data Management (IMS) services at Individual DAAC Site's availability requirement of .993 and a mean down time requirement of < 2 hours during times of staffed operations.
			S-DMS-60360	A	The DMGHW CI shall be configured to support the SDPS function of User Interfaces to Client, Interoperability, Data Server, and Data Management (IMS) services at Individual DAAC Site's availability requirement of .993 and a mean down time requirement of < 2 hours during times of staffed operations.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DSS-02041	A	The ACMHW CI shall be configured to support the SDPS function of User Interfaces to Client, Interoperability, Data Server, and Data Management (IMS) services at Individual DAAC Site's availability requirement of .993 and a mean down time requirement of < 2 hours during times of staffed operations.
			S-DSS-21820	A	The DRPHW CI shall be configured to support the SDPS function of User Interfaces to Client, Interoperability, Data Server, and Data Management (IMS) services at Individual DAAC Site's availability requirement of .993 and a mean down time requirement of < 2 hours during times of staffed operations.
EOSD3940#A	The SDPS function of Information Searches on the ECS Directory shall have an operational availability of 0.993 at a minimum (.9997 design goal) and an MDT of two (2) hours or less (1.4 hour design goal).		S-DMS-60300	A	The DMGHW CI shall be configured to support the SDPS function of information searches on the ECS directory's availability requirement of .993 and a mean down time (MDT) requirement of < 2 hours during times of staffed operations.
			C-MSS-02056	A	The MSS-MHCI shall be configured to support the SDPS function of information searches on the ECS directory's availability requirement of .993 and a mean down time requirement of < 2 hours during times of staffed operations.
			C-CSS-02056	A	The CSS-DCHCI shall be configured to support the SDPS function of information searches on the ECS directory's availability requirement of .993 and a mean down time requirement of < 2 hours during times of staffed operations.
			S-DSS-02042	A	The ACMHW CI shall be configured to support the SDPS function of information searches on the ECS directory's availability requirement of .993 and a mean down time requirement of < 2 hours during times of staffed operations.
EOSD3940#B	The SDPS function of Information Searches on the ECS Directory shall have an operational availability of 0.993 at a minimum (.9997 design goal) and an MDT of two (2) hours or less (1.4 hour design goal).	B: all DAACs	C-MSS-02056	A	The MSS-MHCI shall be configured to support the SDPS function of information searches on the ECS directory's availability requirement of .993 and a mean down time requirement of < 2 hours during times of staffed operations.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-CSS-02056	A	The CSS-DCHCI shall be configured to support the SDPS function of information searches on the ECS directory's availability requirement of .993 and a mean down time requirement of < 2 hours during times of staffed operations.
			S-DSS-02042	A	The ACMHW CI shall be configured to support the SDPS function of information searches on the ECS directory's availability requirement of .993 and a mean down time requirement of < 2 hours during times of staffed operations.
EOSD3950#A	The SDPS function of Data Acquisition Request (DAR) Submittal including TOOs shall have an operational availability of 0.993 at a minimum (.999999 design goal) and an MDT of two (2) hours or less (6 minutes design goal).				
EOSD3950#B	The SDPS function of Data Acquisition Request (DAR) Submittal including TOOs shall have an operational availability of 0.993 at a minimum (.999999 design goal) and an MDT of two (2) hours or less (6 minutes design goal).				
EOSD3960#A	The SDPS function of Metadata Ingest and Update shall have an operational availability of 0.96 at a minimum (.999999 design goal) and an MDT of four (4) hours or less (6 minutes design goal).	A: applicable DAACs	C-MSS-02058	A	The MSS-MHCI shall be configured to support the SDPS function of Metadata Ingest and Update's availability requirement of .96 and a mean down time requirement of < 4 hours during times of staffed operations.
			C-CSS-02058	A	The CSS-DCHCI shall be configured to support the SDPS function of Metadata Ingest and Update's availability requirement of .96 and a mean down time requirement of < 4 hours during times of staffed operations.
			S-DMS-60370	A	The DMGHW CI shall be configured to support the SDPS function of Metadata Ingest and Update's availability requirement of .96 and a mean down time requirement of < 4 hours during times of staffed operations.
			S-INS-60325	A	The ICLHW CI shall be configured to support the SDPS function of Metadata Ingest and Update's Availability requirement of .96 and Mean Down Time requirement of 4 hours or less.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DSS-02043	A	The ACMHW CI shall be configured to support the SDPS function of Metadata Ingest and Update's availability requirement of .96 and a mean down time requirement of < 4 hours during times of staffed operations.
			S-DSS-31010	A	The DIPHW CI shall be configured to support the SDPS function of Metadata Ingest and Update's availability requirement of .96 and a mean down time requirement of < 4 hours during times of staffed operations.
			S-DSS-21810	A	The DRPHW CI shall be configured to support the SDPS function of Metadata Ingest and Update's Availability requirement of .96 and a Mean Down Time of < 4 hrs. during times of staffed operation.
EOSD3960#B	The SDPS function of Metadata Ingest and Update shall have an operational availability of 0.96 at a minimum (.999999 design goal) and an MDT of four (4) hours or less (6 minutes design goal).	B: all DAACs	C-MSS-02058	A	The MSS-MHCI shall be configured to support the SDPS function of Metadata Ingest and Update's availability requirement of .96 and a mean down time requirement of < 4 hours during times of staffed operations.
			C-CSS-02058	A	The CSS-DCHCI shall be configured to support the SDPS function of Metadata Ingest and Update's availability requirement of .96 and a mean down time requirement of < 4 hours during times of staffed operations.
			S-DMS-60370	A	The DMGHW CI shall be configured to support the SDPS function of Metadata Ingest and Update's availability requirement of .96 and a mean down time requirement of < 4 hours during times of staffed operations.
			S-INS-60325	A	The ICLHW CI shall be configured to support the SDPS function of Metadata Ingest and Update's Availability requirement of .96 and Mean Down Time requirement of 4 hours or less.
			S-DSS-02043	A	The ACMHW CI shall be configured to support the SDPS function of Metadata Ingest and Update's availability requirement of .96 and a mean down time requirement of < 4 hours during times of staffed operations.
			S-DSS-31010	A	The DIPHW CI shall be configured to support the SDPS function of Metadata Ingest and Update's availability requirement of .96 and a mean down time requirement of < 4 hours during times of staffed operations.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DSS-21810	A	The DRPHW CI shall be configured to support the SDPS function of Metadata Ingest and Update's Availability requirement of .96 and a Mean Down Time of < 4 hrs. during times of staffed operation.
EOSD3970#A	The SDPS function of Information Searches on Local Holdings shall have an operational availability of 0.96 at a minimum (.999999 design goal) and an MDT of four (4) hours or less (6 minutes design goal).	A: applicable DAACs	C-MSS-02060	A	The MSS-MHCI shall be configured to support the SDPS function of Information Searches On Local Holding's availability requirement of .96 and mean down time requirement of < 4 hours during times of staffed operations.
			C-CSS-02060	A	The CSS-DCHCI shall be configured to support the SDPS function of Information Searches On Local Holding's availability requirement of .96 and mean down time requirement of < 4 hours during times of staffed operations.
			S-DSS-02044	A	The ACMHW CI shall be configured to support the SDPS function of Information Searches On Local Holding's availability requirement of .96 and mean down time requirement of < 4 hours during times of staffed operations.
			S-DSS-21813	A	The DRPHW CI shall be configured to support the SDPS function of Information Searches on Local Holding's Availability of .96 and a Mean Down Time of < 4 hrs. during times of staffed operations.
EOSD3970#B	The SDPS function of Information Searches on Local Holdings shall have an operational availability of 0.96 at a minimum (.999999 design goal) and an MDT of four (4) hours or less (6 minutes design goal).	B: all DAACs	C-MSS-02060	A	The MSS-MHCI shall be configured to support the SDPS function of Information Searches On Local Holding's availability requirement of .96 and mean down time requirement of < 4 hours during times of staffed operations.
			C-CSS-02060	A	The CSS-DCHCI shall be configured to support the SDPS function of Information Searches On Local Holding's availability requirement of .96 and mean down time requirement of < 4 hours during times of staffed operations.
			S-DSS-02044	A	The ACMHW CI shall be configured to support the SDPS function of Information Searches On Local Holding's availability requirement of .96 and mean down time requirement of < 4 hours during times of staffed operations.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DSS-21813	A	The DRPHW CI shall be configured to support the SDPS function of Information Searches on Local Holding's Availability of .96 and a Mean Down Time of < 4 hrs. during times of staffed operations.
EOSD3980#A	The SDPS function of Local Data Order Submission shall have an operational availability of 0.96 at a minimum (.999999 design goal) and an MDT of four (4) hours or less (6 minutes design goal).	A: applicable DAACs	C-MSS-02062	A	The MSS-MHCI shall be configured to support the SDPS function of Local Data Order Submission's availability requirement of .96 and a mean down time requirement of < 4 hours during times of staffed operations.
			C-CSS-02062	A	The CSS-DCHCI shall be configured to support the SDPS function of Local Data Order Submission's availability requirement of .96 and a mean down time requirement of < 4 hours during times of staffed operations.
			S-DMS-60380	A	The DMGHW CI shall be configured to support the SDPS function of Local Data Order Submission's availability requirement of .96 and a mean down time requirement of < 4 hours during times of staffed operations.
			S-DSS-02020	A	The ACMHW CI shall be configured to support the SDPS function of local Data Request Submission's Availability requirement of .96 and Mean Down Time requirement of < 4 hrs during times of staffed operation.
EOSD3980#B	The SDPS function of Local Data Order Submission shall have an operational availability of 0.96 at a minimum (.999999 design goal) and an MDT of four (4) hours or less (6 minutes design goal).	B: all DAACs	C-MSS-02062	A	The MSS-MHCI shall be configured to support the SDPS function of Local Data Order Submission's availability requirement of .96 and a mean down time requirement of < 4 hours during times of staffed operations.
			C-CSS-02062	A	The CSS-DCHCI shall be configured to support the SDPS function of Local Data Order Submission's availability requirement of .96 and a mean down time requirement of < 4 hours during times of staffed operations.
			S-DMS-60380	A	The DMGHW CI shall be configured to support the SDPS function of Local Data Order Submission's availability requirement of .96 and a mean down time requirement of < 4 hours during times of staffed operations.
			S-DSS-02020	A	The ACMHW CI shall be configured to support the SDPS function of local Data Request Submission's Availability requirement of .96 and Mean Down Time requirement of < 4 hrs during times of staffed operation.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
EOSD3990#A	The SDPS function of Data Order Submission Across DAACs shall have an operational availability of 0.96 at a minimum (.999999 design goal) and an MDT of four (4) hours or less (6 minutes design goal).	A: applicable DAACs	C-MSS-02064	A	The MSS-MHCI shall be configured to support the SDPS function of Data Order Submission Across DAAC's availability requirement of .96 and a mean down time requirement of < 4 hours during times of staffed operations.
			C-CSS-02064	A	The CSS-DCHCI shall be configured to support the SDPS function of Data Order Submission Across DAAC's availability requirement of .96 and a mean down time requirement of < 4 hours during times of staffed operations.
			S-DMS-60390	A	The DMGHW CI shall be configured to support the SDPS function of Data Order Submission Across DAAC's availability requirement of .96 and a mean down time requirement of < 4 hours during times of staffed operations.
			C-MSS-02050	A	The MSS-MHCI shall be configured to support the SDPS function of receiving science data's Availability requirement of .999 and Mean Down Time requirement of 2 hours or less during times of staffed operation.
			S-DSS-02030	A	The ACMHW CI shall be configured to support the SDPS function of data order submission across DAACs Availability requirement of .96 and Mean Down Time requirement of < 4 hrs during times of staffed operation.
EOSD3990#B	The SDPS function of Data Order Submission Across DAACs shall have an operational availability of 0.96 at a minimum (.999999 design goal) and an MDT of four (4) hours or less (6 minutes design goal).	B: all DAACs	C-MSS-02064	A	The MSS-MHCI shall be configured to support the SDPS function of Data Order Submission Across DAAC's availability requirement of .96 and a mean down time requirement of < 4 hours during times of staffed operations.
			C-CSS-02064	A	The CSS-DCHCI shall be configured to support the SDPS function of Data Order Submission Across DAAC's availability requirement of .96 and a mean down time requirement of < 4 hours during times of staffed operations.
			S-DMS-60390	A	The DMGHW CI shall be configured to support the SDPS function of Data Order Submission Across DAAC's availability requirement of .96 and a mean down time requirement of < 4 hours during times of staffed operations.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-02050	A	The MSS-MHCI shall be configured to support the SDPS function of receiving science data's Availability requirement of .999 and Mean Down Time requirement of 2 hours or less during times of staffed operation.
			S-DSS-02030	A	The ACMHW CI shall be configured to support the SDPS function of data order submission across DAACs Availability requirement of .96 and Mean Down Time requirement of < 4 hrs during times of staffed operation.
EOSD4000#A	The SDPS function of IMS Data Base Management and Maintenance Interface shall have an operational availability of 0.96 at a minimum (.999999 design goal) and an MDT of four (4) hours or less (6 minutes design goal).	A: applicable DAACs	C-MSS-02066	A	The MSS-MHCI shall be configured to support the SDPS function of Client, Interoperability, Data Management and Data Server (IMS) Data Base Management and Maintenance Interface's availability requirement of .96 and a mean down time requirement of < 4 hours during times of staffed operations.
			C-CSS-02066	A	The CSS-DCHCI shall be configured to support the SDPS function of Client, Interoperability, Data Management and Data Server (IMS) Data Base Management and Maintenance Interface's availability requirement of .96 and a mean down time requirement of < 4 hours during times of staffed operations.
			S-DMS-60400	A	The DMGHW CI shall be configured to support the SDPS function of Client, Interoperability, Data Management and Data Server (IMS) Data Base Management and Maintenance Interface's availability requirement of .96 and a mean down time requirement of < 4 hours during times of staffed operations.
			S-DSS-02045	A	The ACMHW CI shall be configured to support the SDPS function of Client, Interoperability, Data Management and Data Server (IMS) Data Base Management and Maintenance Interface's availability requirement of .96 and a mean down time requirement of < 4 hours during times of staffed operations.
			S-DSS-21814	A	The DRPHW CI shall be configured to support the SDPS function of Client, Interoperability, Data Management and Data Server (IMS) Data Base Management and Maintenance Interface's Availability of .96 and a Mean Down Time of < 4hrs. during times of staffed operations.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
EOSD4000#B	The SDPS function of IMS Data Base Management and Maintenance Interface shall have an operational availability of 0.96 at a minimum (.999999 design goal) and an MDT of four (4) hours or less (6 minutes design goal).	B: all DAACs	C-MSS-02066	A	The MSS-MHCI shall be configured to support the SDPS function of Client, Interoperability, Data Management and Data Server (IMS) Data Base Management and Maintenance Interface's availability requirement of .96 and a mean down time requirement of < 4 hours during times of staffed operations.
			C-CSS-02066	A	The CSS-DCHCI shall be configured to support the SDPS function of Client, Interoperability, Data Management and Data Server (IMS) Data Base Management and Maintenance Interface's availability requirement of .96 and a mean down time requirement of < 4 hours during times of staffed operations.
			S-DMS-60400	A	The DMGHW CI shall be configured to support the SDPS function of Client, Interoperability, Data Management and Data Server (IMS) Data Base Management and Maintenance Interface's availability requirement of .96 and a mean down time requirement of < 4 hours during times of staffed operations.
			S-DSS-02045	A	The ACMHW CI shall be configured to support the SDPS function of Client, Interoperability, Data Management and Data Server (IMS) Data Base Management and Maintenance Interface's availability requirement of .96 and a mean down time requirement of < 4 hours during times of staffed operations.
			S-DSS-21814	A	The DRPHW CI shall be configured to support the SDPS function of Client, Interoperability, Data Management and Data Server (IMS) Data Base Management and Maintenance Interface's Availability of .96 and a Mean Down Time of < 4hrs. during times of staffed operations.
EOSD4010#A	Each computer providing product generation shall have an operational availability of 0.95 at a minimum (.9995 design goal).	A: TRMM	S-DPS-60450	A	Each computer providing product generation capability shall have an operational availability of 0.95 at a minimum.
EOSD4010#B	Each computer providing product generation shall have an operational availability of 0.95 at a minimum (.9995 design goal).	B: AM-1, TRMM	S-DPS-60450	A	Each computer providing product generation capability shall have an operational availability of 0.95 at a minimum.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
EOSD4020#A	At each DAAC site, the product generation functional capabilities shall be spread across multiple product generation computers thereby providing a "failsoft" environment.	TRMM mission: launch plus 12 months, AM-1 mission: launch plus 12 months	S-DPS-20480	A	The PRONG CI shall take a pre-determined error recovery action if the computer resource required to execute the PGE is not available.
			S-DPS-60060	A	The SPRHW CI product generation computer(s) shall have a Fail-Soft capability.
EOSD4020#B	At each DAAC site, the product generation functional capabilities shall be spread across multiple product generation computers thereby providing a "failsoft" environment.	TRMM mission: launch plus 12 months, AM-1 mission: launch plus 12 months	S-DPS-20480	A	The PRONG CI shall take a pre-determined error recovery action if the computer resource required to execute the PGE is not available.
			S-DPS-60060	A	The SPRHW CI product generation computer(s) shall have a Fail-Soft capability.
EOSD4030#A	The SMC function of gathering and disseminating system management information shall have an operational availability of .998 at a minimum (.999998 design goal) and an MDT of 20 minutes or less (5 minutes design goal), for critical services.	A: DAACs and SMC	C-ISS-04155	A	The ISS services at the SMC shall be configured to support the SMC function of Gathering and Disseminating System Management Information's Availability requirement of .998 and a Mean Down Time of < 20 minutes during times of staffed operation.
			C-HRD-28020	A	The CSS DCHCI Enterprise Communications Server at the SMC shall be configured to support the SMC function of Gathering and Disseminating System Management Information's availability requirement of .998 and a mean down time of <= 20 minutes during times of staffed operation.
			C-MSS-00010	A	The MSS services at the SMC shall be configured to support the SMC function of Gathering and Disseminating System Management Information's Availability requirement of .998 and a mean down time of 20 minutes or less for critical services during times of staffed operation.
			C-CSS-00010	A	The CSS services at the SMC shall be configured to support the SMC function of Gathering and Disseminating System Management Information's availability requirement of .998 and a Mean Down Time of < 20 minutes during times of staffed operation.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-HRD-18010	A	The MSS-MHCI functional string between the Enterprise Monitoring Server and the Local Management Server at the SMC shall be configured to support the SMC function of Gathering and Disseminating System Management Information's Availability requirement of 0.998 and a Mean Down Time of < 20 minutes during times of staffed operation.
			C-HRD-16025	A	The Local Management Server shall be capable of meeting the capacity and performance characteristics of Appendix A of the current version of 304-CD-003 for all DAAC configurations.
			C-HRD-16020	A	The Enterprise Monitoring Server shall be capable of meeting the capacity and performance characteristics of Appendix A of the current version of 304-CD-003.
			C-HRD-16030	A	The Management Workstation shall be capable of meeting the capacity and performance characteristics of Appendix A of the current version of 304-CD-003.
			C-HRD-16000	A	The Enterprise Monitoring Server shall be capable of 100 percent growth in the processing speed specified in Appendix A of the current version of 304-CD-003 without modifications or upgrades to software.
			C-HRD-16005	A	The Enterprise Monitoring Server shall be capable of 100 percent growth in the storage capacity specified in Appendix A of the current version of 304-CD-003 without modifications or upgrades to software.
			C-HRD-16010	A	The Local Management Server shall be capable of 100 percent growth in the processing speed specified in Appendix A of the current version of 304-CD-003 without modifications or upgrades to software.
			C-HRD-16015	A	The Local Management Server shall be capable of 100 percent growth in the storage capacity specified in Appendix A of the current version of 304-CD-003 without modifications or upgrades to software.
			C-HRD-26020	A	The Enterprise Communications Server shall be capable of meeting the capacity and performance characteristics of Appendix A of the current version of 304-CD-003.
			C-HRD-26025	A	The Local Communications Server shall be capable of meeting the capacity and performance characteristics of Appendix A of the current version of 304-CD-003.
			C-HRD-26030	A	The Bulletin Board Server shall be capable of meeting the capacity and performance characteristics of Appendix A of the current version of 304-CD-003.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
EOSD4030#B	The SMC function of gathering and disseminating system management information shall have an operational availability of .998 at a minimum (.999998 design goal) and an MDT of 20 minutes or less (5 minutes design goal), for critical services.	B: all DAACs	C-ISS-04155	A	The ISS services at the SMC shall be configured to support the SMC function of Gathering and Disseminating System Management Information's Availability requirement of .998 and a Mean Down Time of < 20 minutes during times of staffed operation.
			C-MSS-00010	A	The MSS services at the SMC shall be configured to support the SMC function of Gathering and Disseminating System Management Information's Availability requirement of .998 and a mean down time of 20 minutes or less for critical services during times of staffed operation.
			C-CSS-00010	A	The CSS services at the SMC shall be configured to support the SMC function of Gathering and Disseminating System Management Information's availability requirement of .998 and a Mean Down Time of < 20 minutes during times of staffed operation.
			C-CSS-03740	B	The CSS-DCHW CI Enterprise Communications Server shall be capable of meeting the capacity and performance characteristics of Appendix A of the current version of 304-CD-005.
			C-CSS-03750	B	The CSS-DCHW CI Local Communications Server shall be capable of meeting the capacity and performance characteristics of Appendix A of the current version of 304-CD-005.
			C-CSS-03760	B	The CSS-DCHW CI Bulletin Board Server shall be capable of meeting the capacity and performance characteristics of Appendix A of the current version of 304-CD-005.
			C-CSS-03940	B	The CSS-DCHW CI Enterprise Communications Server at the SMC shall be configured to support the SMC function of Gathering and Disseminating System Management Information's Availability requirement of 0.998 and an Mean Down Time of 20 minutes during times of staffed operation.
			C-MSS-03800	B	The MSS-MHW CI Enterprise Monitoring Server shall be capable of 100 percent growth in the processing speed specified in Appendix A of the current version of 304-CD-005 without modifications or upgrades to software.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-03810	B	The MSS-MHW CI Enterprise Monitoring Server shall be capable of 100 percent growth in the storage capacity specified in Appendix A of the current version of 304-CD-005 without modifications or upgrades to software.
			C-MSS-03820	B	The MSS-MHW CI Local Management Server shall be capable of 100 percent growth in the processing speed specified in Appendix A of the current version of 304-CD-005 without modifications or upgrades to software.
			C-MSS-03830	B	The MSS-MHW CI Local Management Server shall be capable of 100 percent growth in the storage capacity specified in Appendix A of the current version of 304-CD-005 without modifications or upgrades to software.
			C-MSS-03840	B	The MSS-MHW CI Enterprise Monitoring Server shall be capable of meeting the capacity and performance characteristics of Appendix A of the current version of 304-CD-005.
			C-MSS-03850	B	The MSS-MHW CI Local Management Server shall be capable of meeting the capacity and performance characteristics of Appendix A of the current version of 304-CD-005 for all DAAC configurations.
			C-MSS-03860	B	The MSS-MHW CI Management Workstation shall be capable of meeting the capacity and performance characteristics of Appendix A of the current version of 304-CD-005.
			C-MSS-04020	B	The MSS-MHW CI functional string between the Enterprise Monitoring Server and the Local Management Server shall provide a function Ao (operational availability) of 0.998 and an MDT of 20 minutes.
			C-MSS-04030	B	The MSS-MHW CI functional string between the Local Management Server and ECS managed objects shall provide a function Ao of 0.998 and an MDT of 20 minutes.
EOSD4035#A	The ESN shall have no single point of failure for functions associated with network databases and configuration data.	A: applicable DAACs	C-MSS-00020	A	The MSS services shall have no single point of failure for functions associated with network databases and configuration data.
			C-CSS-00100	A	The CSS Directory services shall maintain multiple copies of the namespace on different hosts to provide fault tolerance.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-HRD-11000	A	The Enterprise Monitoring Server shall be physically and functionally identical to the Enterprise Communications Server in supporting the CSMS requirements.
			C-HRD-11005	A	The Enterprise Monitoring Server shall share data with the Local System Management Server in supporting the CSMS requirements.
			C-HRD-11010	A	The Enterprise Monitoring Server shall preserve DAAC autonomy of operations.
			C-HRD-11105	A	The Enterprise Monitoring Server processor shall be capable of expansion with additional quantities and types of peripherals.
			C-HRD-11320	A	The Enterprise Monitoring Server data storage shall have the following hot swappable components: a. Disks b. Power Supplies c. Fans d. Disk-array controllers
			C-HRD-11325	A	The Enterprise Monitoring Server data storage shall be cross-strapped with the Enterprise Communications Server data storage in supporting the CSMS requirements.
			C-HRD-12000	A	The Local Management Server shall be physically and functionally identical to the Local Communications Server in supporting the CSMS requirements.
			C-HRD-12005	A	The Local Management Server shall share data with the Enterprise Monitoring Server in supporting the CSMS requirements.
			C-HRD-12010	A	The Local Management Server shall manage only the local DAAC and preserve other DAAC autonomy of operations.
			C-HRD-12105	A	The Local Management Server processor shall be capable of expansion with additional quantities and types of peripherals.
			C-HRD-12110	A	The Local Management Server processor shall be upgradeable/replaceable within the same product family without major software modification or replacement of any peripheral or attached component.
			C-HRD-12310	A	The Local Management Server data storage shall be compatible with the Enterprise Monitoring Server intermediate-term data storage.
			C-HRD-12315	A	The Local Management Server data storage shall support RAID level-5: striping with interleaved parity.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-HRD-12320	A	The Local Management Server data storage shall have the following hot swappable components: a. Disks b. Power Supplies c. Fans d. Disk-array controllers
			C-HRD-12325	A	The Local Management Server data storage shall be cross-strapped with the Local Communications Server short-term data storage in supporting the CSMS requirements.
			C-HRD-13000	A	All Management Workstations and processors shall be capable of operating simultaneously and independently of other workstations and management/communications servers.
			C-HRD-13300	A	The Management Workstation data storage shall be capable of retrieving data from the data storage function of both the Enterprise Monitoring Server and the Local Management Server.
			C-HRD-13505	A	All Management Workstation disk drives serving a specific function (e.g. local management, enterprise monitoring) shall be identical and will have equal capacity.
			C-HRD-21000	A	The Enterprise Communications Server shall be physically and functionally identical to the Enterprise Monitoring Server in supporting the CSMS requirements.
			C-HRD-21005	A	The Enterprise Communications Server shall share data with the Local Communications Server in supporting the CSMS requirements.
			C-HRD-21315	A	The Enterprise Communications Server data storage shall support RAID level-5: striping with interleaved parity.
			C-HRD-21320	A	The Enterprise Communications Server data storage shall have the following hot swappable components: a. Disks b. Power Supplies c. Fans d. Disk-array controllers
			C-HRD-21325	A	The Enterprise Communications Server data storage shall be cross-strapped with the Enterprise Monitoring Server data storage in supporting the CSMS requirements.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-HRD-22000	A	The Local Communications Server shall be physically and functionally identical to the Local Management Server in supporting the CSMS requirements.
			C-HRD-22005	A	The Local Communications Server shall share data with the Enterprise Communications Server in supporting the CSMS requirements.
			C-HRD-22310	A	The Local Communications Server short-term data storage shall be compatible with the Enterprise Communications Server intermediate-term data storage.
			C-HRD-22315	A	The Local Communications Server data storage shall support RAID level-5: striping with interleaved parity.
			C-HRD-22320	A	The Local Communications Server data storage shall have the following hot swappable components: a. Disks b. Power Supplies c. Fans d. Disk-array controllers
			C-HRD-22325	A	The Local Communications Server data storage shall be cross-strapped with the Local Management Server short-term data storage in supporting the CSMS requirements.
			C-HRD-23000	A	The Bulletin Board Server shall share data with the Enterprise Communications Server in supporting the CSMS requirements.
			C-HRD-23310	A	The Bulletin Board Server data storage shall be capable of archiving data to the ECS data server archive for long-term storage and software/toolkit safestore.
			C-CSS-00020	A	The CSS services shall have no single point of failure for functions associated with network databases and configuration data.
			C-ISS-04020	A	Backups of all router configuration files shall be maintained at the local DAAC and the Network Management Facility (NMF).
EOSD4035#B	The ESN shall have no single point of failure for functions associated with network databases and configuration data.	B: all DAACs and EOC	C-MSS-00020	A	The MSS services shall have no single point of failure for functions associated with network databases and configuration data.
			C-CSS-00100	A	The CSS Directory services shall maintain multiple copies of the namespace on different hosts to provide fault tolerance.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-CSS-00020	A	The CSS services shall have no single point of failure for functions associated with network databases and configuration data.
			C-ISS-04020	A	Backups of all router configuration files shall be maintained at the local DAAC and the Network Management Facility (NMF).
			C-CSS-02000	B	The CSS-DCHW CI Enterprise Communications Server shall be physically and functionally identical to the Enterprise Monitoring Server in supporting the CSMS requirements.
			C-CSS-02010	B	The CSS-DCHW CI Enterprise Communications Server shall share data with the Local Communications Server in supporting the CSMS requirements.
			C-CSS-02020	B	The CSS-DCHW CI Enterprise Communications Server shall preserve DAAC autonomy of operations.
			C-CSS-02220	B	The CSS-DCHW CI Enterprise Communications Server data storage shall support RAID level-5: striping with interleaved parity.
			C-CSS-02240	B	The CSS-DCHW CI Enterprise Communications Server data storage shall be cross-strapped with the Enterprise Monitoring Server data storage in supporting the CSMS requirements.
			C-CSS-02600	B	The CSS-DCHW CI Local Communications Server shall be physically and functionally identical to the Local Management Server in supporting the CSMS requirements.
			C-CSS-02610	B	The CSS-DCHW CI Local Communications Server shall share data with the Enterprise Communications Server in supporting the CSMS requirements.
			C-CSS-02620	B	The Local Communications Server shall be configurable according to local DAAC user authentication/authorization policy and preserve other DAAC autonomy of operations.
			C-CSS-02810	B	The CSS-DCHW CI Local Communications Server short-term data storage shall be compatible with the Enterprise Communications Server intermediate-term data storage.
			C-CSS-02830	B	The CSS-DCHW CI Local Communications Server data storage shall have the following hot swappable components: a. Disks b. Power Supplies c. Fans d. Disk-array controllers

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-CSS-02840	B	The CSS-DCHW CI Local Communications Server data storage shall be cross-strapped with the Local Management Server short-term data storage in supporting the CSMS requirements.
			C-CSS-03200	B	The CSS-DCHW CI Bulletin Board Server shall share data with the Enterprise Communications Server in supporting the CSMS requirements.
			C-CSS-03410	B	The CSS-DCHW CI Bulletin Board Server data storage shall be capable of archiving data to the ECS data server archive for long-term storage and software/toolkit safestore.
			C-MSS-02000	B	The MSS-MHW CI Enterprise Monitoring Server shall be physically and functionally identical to the Enterprise Communications Server in supporting the CSMS requirements.
			C-MSS-02010	B	The MSS-MHW CI Enterprise Monitoring Server shall share data with the Local System Management Server in supporting the CSMS requirements.
			C-MSS-02020	B	The MSS-MHW CI Enterprise Monitoring Server shall preserve DAAC autonomy of operations.
			C-MSS-02110	B	The MSS-MHW CI Enterprise Monitoring Server processor shall be capable of expansion with additional quantities and types of peripherals.
			C-MSS-02230	B	The MSS-MHW CI Enterprise Monitoring Server data storage shall have the following hot swappable components: a. Disks b. Power Supplies c. Fans d. Disk-array controllers
			C-MSS-02240	B	The MSS-MHW CI Enterprise Monitoring Server data storage shall be cross-strapped with the Enterprise Communications Server data storage in supporting the CSMS requirements.
			C-MSS-02600	B	The MSS-MHW CI Local Management Server shall be physically and functionally identical to the Local Communications Server in supporting the CSMS requirements.
			C-MSS-02610	B	The MSS-MHW CI Local Management Server shall share data with the Enterprise Monitoring Server in supporting the CSMS requirements.
			C-MSS-02620	B	The MSS-MHW CI Local Management Server shall manage only the local DAAC and preserve other DAAC autonomy of operations.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-02710	B	The MSS-MHW CI Local Management Server processor shall be capable of expansion with additional quantities and types of peripherals.
			C-MSS-02720	B	The MSS-MHW CI Local Management Server processor shall be upgradeable/replaceable within the same product family without major software modification or replacement of any peripheral or attached component.
			C-MSS-02810	B	The MSS-MHW CI Local Management Server data storage shall be compatible with the Enterprise Monitoring Server intermediate-term data storage.
			C-MSS-02820	B	The MSS-MHW CI Local Management Server data storage shall support RAID level-5: striping with interleaved parity.
			C-MSS-02830	B	The MSS-MHW CI Local Management Server data storage shall have the following hot swappable components: a. Disks b. Power Supplies c. Fans d. Disk-array controllers
			C-MSS-02840	B	The MSS-MHW CI Local Management Server data storage shall be cross-strapped with the Local Communications Server short-term data storage in supporting the CSMS requirements.
			C-MSS-03200	B	All MSS-MHW CI Management Workstations and processors shall be capable of operating simultaneously and independently of other workstations and management/communications servers.
			C-MSS-03500	B	The MSS-MHW CI Management Workstation data storage shall be capable of retrieving data from the data storage function of both the Enterprise Monitoring Server and the Local Management Server.
			C-MSS-03600	B	All MSS-MHW CI Management Workstation disk drives serving a specific function (e.g. local management, enterprise monitoring) shall be identical and will have equal capacity.
EOSD4036#A	The operational availability of individual ESN segments shall be consistent with the specified operational availability of the supported ECS functions.		C-HRD-11315	A	The Enterprise Monitoring Server data storage shall support RAID level-5: striping with interleaved parity.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-HRD-11320	A	The Enterprise Monitoring Server data storage shall have the following hot swappable components: a. Disks b. Power Supplies c. Fans d. Disk-array controllers
			C-HRD-11325	A	The Enterprise Monitoring Server data storage shall be cross-strapped with the Enterprise Communications Server data storage in supporting the CSMS requirements.
			C-HRD-12315	A	The Local Management Server data storage shall support RAID level-5: striping with interleaved parity.
			C-HRD-12320	A	The Local Management Server data storage shall have the following hot swappable components: a. Disks b. Power Supplies c. Fans d. Disk-array controllers
			C-HRD-12325	A	The Local Management Server data storage shall be cross-strapped with the Local Communications Server short-term data storage in supporting the CSMS requirements.
			C-HRD-13505	A	All Management Workstation disk drives serving a specific function (e.g. local management, enterprise monitoring) shall be identical and will have equal capacity.
			C-HRD-13900	A	Each Printer shall be physically and functionally identical in supporting the CSMS printing requirements.
			C-HRD-21315	A	The Enterprise Communications Server data storage shall support RAID level-5: striping with interleaved parity.
			C-HRD-21325	A	The Enterprise Communications Server data storage shall be cross-strapped with the Enterprise Monitoring Server data storage in supporting the CSMS requirements.
			C-HRD-22315	A	The Local Communications Server data storage shall support RAID level-5: striping with interleaved parity.
			C-HRD-22325	A	The Local Communications Server data storage shall be cross-strapped with the Local Management Server short-term data storage in supporting the CSMS requirements.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-HRD-42005	A	The GSFC LSM in the R-A timeframe shall provide a Local Communications Server configured with: a. Two Fixed Disks b. One Tape Drive c. One CD-ROM Drive d. Storage cross-strapped with Local Management Server
			C-HRD-42010	A	The GSFC LSM in the R-A timeframe shall provide one Data Storage Unit supporting RAID level 5 cross strapped between the local management and local communications servers.
			C-HRD-42020	A	The GSFC LSM in the R-A timeframe shall provide 1 system printer.
			C-HRD-42500	A	The GSFC infrastructure in the R-A timeframe shall provide one GSFC LAN.
			C-HRD-42700	A	The GSFC EMC in the R-A timeframe shall provide an enterprise monitoring server, enterprise communications server, four (4) Management Workstations, one (1) printer, and bulletin board server transferred from the IR-1 EDF.
			C-HRD-42705	A	The GSFC EMC in the R-A timeframe shall provide, via the ECS data server, a Enterprise Monitoring Server long-term data storage capability.
			C-HRD-43000	A	The EOC LSM in the R-A timeframe shall provide a Local Management Server configured with: a. Two Fixed Disks b. One Tape Drive c. One CD-ROM Drive d. Storage cross-strapped with Local Communications Server
			C-HRD-43005	A	The EOC LSM in the R-A timeframe shall provide a Local Communications Server configured with: a. Two Fixed Disks b. One Tape Drive c. One CD-ROM Drive d. Storage cross-strapped with Local Management Server
			C-HRD-43010	A	The EOC LSM in the R-A timeframe shall provide one Data Storage Unit supporting RAID level 5 cross strapped between the local management and local communications servers.
			C-HRD-43015	A	The EOC LSM in the R-A timeframe shall provide two (2) Management Workstations, which can perform any EOC LSM function.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-HRD-43020	A	The EOC LSM in the R-A timeframe shall provide 1 system printer.
			C-HRD-43500	A	The EOC infrastructure in the R-A timeframe shall provide one EOC LAN.
			C-HRD-44005	A	The MSFC LSM in the R-A timeframe shall provide a Local Communications Server configured with: a. Two Fixed Disks b. One Tape Drive c. One CD-ROM Drive d. Storage cross-strapped with Local Management Server
			C-HRD-44010	A	The MSFC LSM in the R-A timeframe shall provide one Data Storage Unit supporting RAID level 5 cross strapped between the local management and local communications servers.
			C-HRD-44020	A	The MSFC LSM in the R-A timeframe shall provide 1 system printer.
			C-HRD-44500	A	The MSFC infrastructure in the R-A timeframe shall provide one MSFC LAN.
			C-HRD-45005	A	The LaRC LSM in the R-A timeframe shall provide a Local Communications Server configured with: a. Two Fixed Disks b. One Tape Drive c. One CD-ROM Drive d. Storage cross-strapped with Local Management Server
			C-HRD-45010	A	The LaRC LSM in the R-A timeframe shall provide one Data Storage Unit supporting RAID level 5 cross strapped between the local management and local communications servers.
			C-HRD-45020	A	The LaRC LSM in the R-A timeframe shall provide 1 system printer.
			C-HRD-45500	A	The LaRC infrastructure in the R-A timeframe shall provide one LaRC LAN.
			C-HRD-46005	A	The EDC LSM in the R-A timeframe shall provide a Local Communications Server configured with: a. Two Fixed Disks b. One Tape Drive c. One CD-ROM Drive d. Storage cross-strapped with Local Management Server

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-HRD-46010	A	The EDC LSM in the R-A timeframe shall provide one Data Storage Unit supporting RAID level 5 cross strapped between the local management and local communications servers.
			C-HRD-46020	A	The EDC LSM in the R-A timeframe shall provide 1 system printer.
			C-HRD-46500	A	The EDC infrastructure in the R-A timeframe shall provide one EDC LAN.
			C-ISS-04070	A	The portion of the DAAC LAN supporting the SDPS function of archiving and distributing data shall contribute to the function's operational availability of 0.98 at a minimum and a mean down time of two (2) hours or less during times of staffed operation.
			C-ISS-04080	A	The portion of the DAAC LAN supporting the SDPS function of User Interfaces to Client, Interoperability, Data Server, and Data Management (IMS) services at Individual DAAC Sites shall contribute to the function's operational availability of 0.993 at a minimum and a mean down time requirement of two (2) hours or less during times of staffed operations.
			C-ISS-04090	A	The portion of the DAAC LAN supporting the SDPS function of information searches on the ECS Directory shall contribute to the function's operational availability of 0.993 at a minimum and a mean down time of two (2) hours or less during times of staffed operation.
			C-ISS-04110	A	The portion of the DAAC LAN supporting the SDPS function of metadata ingest and update shall contribute to the function's operational availability of 0.96 at a minimum and a mean down time of four (4) hours or less during times of staffed operation.
			C-ISS-04120	A	The portion of the DAAC LAN supporting the SDPS function of information searches on local holdings shall contribute to the function's operational availability of 0.96 at a minimum and a mean down time of four (4) hours or less during times of staffed operation.
			C-ISS-04130	A	The portion of the DAAC LAN supporting the SDPS function of local data order submission shall contribute to the function's operational availability of 0.96 at a minimum and a mean down time of four (4) hours or less during times of staffed operations.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-ISS-04140	A	The portion of the DAAC LAN supporting the SDPS function of local data order submission across DAACs shall contribute to the function's operational availability of 0.96 at a minimum and a mean down time of four (4) hours or less during times of staffed operation.
			C-ISS-04150	A	The portion of the DAAC LAN supporting the SDPS function of Client, Interoperability, Data Management and Data Server (IMS) Data Base Management and Maintenance Interface shall contribute to the function's operational availability of 0.96 at a minimum and a mean down time of four (4) hours or less during times of staffed operation.
			C-MSS-03710	A	Each printer shall have a print density of at least 300 dpi.
			C-HRD-42015	A	The GSFC LSM in the R-A timeframe shall provide two (2) Management Workstations, which can perform any GSFC LSM function.
			C-HRD-44015	A	The MSFC LSM in the R-A timeframe shall provide two (2) Management Workstations, which can perform any MSFC LSM function.
			C-HRD-45015	A	The LaRC LSM in the R-A timeframe shall provide two (2) Management Workstations, which can perform any LaRC LSM function.
			C-HRD-46015	A	The EDC LSM in the R-A timeframe shall provide two (2) Management Workstations, which can perform any EDC LSM function.
EOSD4036#B	The operational availability of individual ESN segments shall be consistent with the specified operational availability of the supported ECS functions.		C-ISS-04070	A	The portion of the DAAC LAN supporting the SDPS function of archiving and distributing data shall contribute to the function's operational availability of 0.98 at a minimum and a mean down time of two (2) hours or less during times of staffed operation.
			C-ISS-04080	A	The portion of the DAAC LAN supporting the SDPS function of User Interfaces to Client, Interoperability, Data Server, and Data Management (IMS) services at Individual DAAC Sites shall contribute to the function's operational availability of 0.993 at a minimum and a mean down time requirement of two (2) hours or less during times of staffed operations.
			C-ISS-04090	A	The portion of the DAAC LAN supporting the SDPS function of information searches on the ECS Directory shall contribute to the function's operational availability of 0.993 at a minimum and a mean down time of two (2) hours or less during times of staffed operation.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-ISS-04110	A	The portion of the DAAC LAN supporting the SDPS function of metadata ingest and update shall contribute to the function's operational availability of 0.96 at a minimum and a mean down time of four (4) hours or less during times of staffed operation.
			C-ISS-04120	A	The portion of the DAAC LAN supporting the SDPS function of information searches on local holdings shall contribute to the function's operational availability of 0.96 at a minimum and a mean down time of four (4) hours or less during times of staffed operation.
			C-ISS-04130	A	The portion of the DAAC LAN supporting the SDPS function of local data order submission shall contribute to the function's operational availability of 0.96 at a minimum and a mean down time of four (4) hours or less during times of staffed operations.
			C-ISS-04140	A	The portion of the DAAC LAN supporting the SDPS function of local data order submission across DAACs shall contribute to the function's operational availability of 0.96 at a minimum and a mean down time of four (4) hours or less during times of staffed operation.
			C-ISS-04150	A	The portion of the DAAC LAN supporting the SDPS function of Client, Interoperability, Data Management and Data Server (IMS) Data Base Management and Maintenance Interface shall contribute to the function's operational availability of 0.96 at a minimum and a mean down time of four (4) hours or less during times of staffed operation.
			C-MSS-03710	A	Each printer shall have a print density of at least 300 dpi.
			C-CSS-02820	B	The CSS-DCHW CI Local Communications Server data storage shall support RAID level-5: striping with interleaved parity.
			C-ISS-04102	B	The portion of the EDC DAAC LAN supporting the SDPS function of Data Acquisition Request (DAR) Submittal including TOOs shall contribute to the function's operational availability of 0.993 at a minimum and mean down time of two (2) hours or less during times of staffed operation.
			C-MSS-02220	B	The MSS-MHW CI Enterprise Monitoring Server data storage shall support RAID level-5: striping with interleaved parity.
			C-MSS-03700	B	Each MSS-MHW CI Printer shall be physically and functionally identical in supporting the CSMS printing requirements.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-05200	B	The GSFC LSM shall provide a MSS-MHW CI Local Management Server.
			C-MSS-05210	B	The GSFC LSM MSS-MHW CI Local Management Server shall be configured with fixed disk, tape drive, and CD-ROM drive storage devices.
			C-MSS-05220	B	The GSFC LSM shall provide a MSS-MHW CI Local Communications Server.
			C-MSS-05230	B	The GSFC LSM MSS-MHW CI Local Communications Server shall be configured with fixed disk, tape drive, and CD-ROM drive storage devices.
			C-MSS-05240	B	The GSFC LSM MSS-MHW CI Local Communications Server shall provide storage that is cross-strapped with the Local Management Server.
			C-MSS-05250	B	The GSFC LSM shall provide one MSS-MHW CI Data Storage Unit supporting RAID level 5 cross strapped between the local management and local communications servers.
			C-MSS-05260	B	The GSFC LSM shall provide two (2) MSS-MHW CI Management Workstations, which can perform any GSFC LSM function.
			C-MSS-05270	B	The GSFC LSM shall provide a MSS-MHW CI system printer.
			C-MSS-05280	B	The GSFC LSM shall provide a MSS-MHW CI dot-matrix printer.
			C-MSS-05290	B	The GSFC infrastructure shall provide a GSFC MSS-MHW CI LAN.
			C-MSS-05300	B	The GSFC EMC shall provide an MSS-MHW CI enterprise monitoring server, enterprise communications server, four (4) Management Workstations, one (1) printer, and bulletin board server transferred from the IR-1 EDF.
			C-MSS-05310	B	The GSFC EMC shall provide, via the ECS data server, MSS-MHW CI Enterprise Monitoring Server long-term data storage capability.
			C-MSS-05320	B	The GSFC EMC shall provide a MSS-MHW CI dot-matrix printer.
			C-MSS-05400	B	The EOC LSM shall provide a MSS-MHW CI Local Management Server.
			C-MSS-05410	B	The EOC LSM MSS-MHW CI Local Management Server shall be configured with fixed disk, tape drive, and CD-ROM drive storage devices.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-05420	B	The EOC LSM MSS-MHW CI Local Management Servershall provide storage that is cross-strapped with the Local Communications Server.
			C-MSS-05430	B	The EOC LSM shall provide a MSS-MHW CI Local Communications Server.
			C-MSS-05440	B	The EOC LSM MSS-MHW CI Local Communications Server shall be configured with fixed disk, tape drive, and CD-ROM drive storage devices.
			C-MSS-05450	B	The EOC LSM MSS-MHW CI Local Communications Server shall provide storage that is cross-strapped with the Local Management Server.
			C-MSS-05460	B	The EOC LSM shall provide one MSS-MHW CI Data Storage Unit supporting RAID level 5 cross strapped between the local management and local communications servers.
			C-MSS-05470	B	The EOC LSM shall provide two (2) MSS-MHW CI Management Workstations, which can perform any EOC LSM function.
			C-MSS-05480	B	The EOC LSM shall provide a MSS-MHW CI system printer.
			C-MSS-05490	B	The EOC LSM shall provide a MSS-MHW CI dot-matrix printer.
			C-MSS-05500	B	The EOC infrastructure shall provide one EOC MSS-MHW CI LAN.
			C-MSS-05600	B	The MSFC LSM shall provide a MSS-MHW CI Local Management Server.
			C-MSS-05610	B	The MSFC LSM MSS-MHW CI Local Management Server shall be configured with fixed disk, tape drive, and CD-ROM drive storage devices.
			C-MSS-05620	B	The MSFC LSM shall provide a MSS-MHW CI Local Communications Server.
			C-MSS-05630	B	The MSFC LSM MSS-MHW CI Local Communications Servershall be configured with fixed disk, tape drive, and CD-ROM drive storage devices.
			C-MSS-05640	B	The MSFC LSM MSS-MHW CI Local Communications Servershall provide storage that is cross-strapped with the Local Management Server.
			C-MSS-05650	B	The MSFC LSM shall provide a MSS-MHW CI Data Storage Unit supporting RAID level 5 cross strapped between the local management and local communications servers.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-05660	B	The MSFC LSM shall provide two (2) MSS-MHW CI Management Workstations, which can perform any MSFC LSM function.
			C-MSS-05670	B	The MSFC LSM shall provide a MSS-MHW CI system printer.
			C-MSS-05680	B	The MSFC LSM shall provide a MSS-MHW CI dot-matrix printer.
			C-MSS-05690	B	The MSFC infrastructure shall provide one MSFC MSS-MHW CI LAN.
			C-MSS-05800	B	The LaRC LSM shall provide a MSS-MHW CI Local Management Server.
			C-MSS-05810	B	The LaRC LSM MSS-MHW CI Local Management Server shall be configured with fixed disk, tape drive, and CD-ROM drive storage devices.
			C-MSS-05820	B	The LaRC LSM shall provide a MSS-MHW CI Local Communications Server.
			C-MSS-05830	B	The LaRC LSM MSS-MHW CI Local Communications Servershall be configured with fixed disk, tape drive, and CD-ROM drive storage devices.
			C-MSS-05840	B	The LaRC LSM MSS-MHW CI Local Communications Server shall provide storage that is cross-strapped with the Local Management Server.
			C-MSS-05850	B	The LaRC LSM shall provide one MSS-MHW CI Data Storage Unit supporting RAID level 5 cross strapped between the local management and local communications servers.
			C-MSS-05860	B	The LaRC LSM shall provide two (2) MSS-MHW CI Management Workstations, which can perform any LaRC LSM function.
			C-MSS-05870	B	The LaRC LSM shall provide 1 MSS-MHW CI system printer.
			C-MSS-05880	B	The LaRC LSM shall provide a MSS-MHW CI dot-matrix printer.
			C-MSS-05890	B	The LaRC infrastructure shall provide a LaRC MSS-MHW CI LAN.
			C-MSS-06000	B	The EDC LSM shall provide a MSS-MHW CI Local Management Server.
			C-MSS-06010	B	The EDC LSM MSS-MHW CI Local Management Server shall be configured with fixed disk, tape drive, and CD-ROM drive storage devices.
			C-MSS-06020	B	The EDC LSM shall provide a MSS-MHW CI Local Communications Server.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-06030	B	The EDC LSM MSS-MHW CI Local Communications Server shall be configured with fixed disk, tape drive, and CD-ROM drive storage devices.
			C-MSS-06040	B	The EDC LSM MSS-MHW CI Local Communications Server shall provide storage that is cross-strapped with the Local Management Server.
			C-MSS-06050	B	The EDC LSM shall provide a MSS-MHW CI Data Storage Unit supporting RAID level 5 cross strapped between the local management and local communications servers.
			C-MSS-06060	B	The EDC LSM shall provide two (2) MSS-MHW CI Management Workstations, which can perform any EDC LSM function.
			C-MSS-06070	B	The EDC LSM shall provide a MSS-MHW CI system printer.
			C-MSS-06080	B	The EDC LSM shall provide a MSS-MHW CI system printer.
			C-MSS-06090	B	The EDC infrastructure shall provide an EDC MSS-MHW CI LAN.
			C-MSS-06200	B	The JPL LSM shall provide a MSS-MHW CI Local Management Server.
			C-MSS-06210	B	The JPL LSM MSS-MHW CI Local Management Server shall be configured with fixed disk, tape drive, and CD-ROM drive storage devices.
			C-MSS-06220	B	The JPL LSM shall provide a MSS-MHW CI Local Communications Server.
			C-MSS-06230	B	The JPL LSM MSS-MHW CI Local Communications Server shall be configured with fixed disk, tape drive, and CD-ROM drive storage devices.
			C-MSS-06240	B	The JPL LSM MSS-MHW CI Local Communications Server shall provide storage that is cross-strapped with the Local Management Server.
			C-MSS-06250	B	The JPL LSM shall provide a MSS-MHW CI Data Storage Unit supporting RAID level 5 cross strapped between the local management and local communications servers.
			C-MSS-06260	B	The JPL LSM shall provide two (2) MSS-MHW CI Management Workstations, which can perform any EOC LSM function.
			C-MSS-06270	B	The JPL LSM shall provide a MSS-MHW CI system printer.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-06280	B	The JPL LSM shall provide a MSS-MHW CI dot-matrix printer.
			C-MSS-06290	B	The JPL infrastructure shall provide a JPL MSS-MHW CI LAN.
			C-MSS-06400	B	The SMC LSM shall provide a MSS-MHW CI Local Management Server.
			C-MSS-06410	B	The SMC LSM MSS-MHW CI Local Management Server shall be configured with fixed disk, tape drive, and CD-ROM drive storage devices.
			C-MSS-06420	B	The SMC LSM shall provide a MSS-MHW CI Local Communications Server.
			C-MSS-06430	B	The SMC LSM MSS-MHW CI Local Communications Server shall be configured with fixed disk, tape drive, and CD-ROM drive storage devices.
			C-MSS-06440	B	The SMC LSM MSS-MHW CI Local Communications Server shall provide storage that is cross-strapped with the Local Management Server.
			C-MSS-06450	B	The SMC LSM shall provide a MSS-MHW CI Data Storage Unit supporting RAID level 5 cross strapped between the local management and local communications servers.
			C-MSS-06460	B	The SMC LSM shall provide two (2) MSS-MHW CI Management Workstations, which can perform any EOC LSM function.
			C-MSS-06470	B	The SMC LSM shall provide a MSS-MHW CI system printer.
			C-MSS-06480	B	The SMC LSM shall provide a MSS-MHW CI dot-matrix printer.
			C-MSS-06490	B	The SMC EMC shall provide an MSS-MHW CI enterprise monitoring server, enterprise communications server, accounting and billing server, four (4) Management Workstations, printer, dot-matrix printer, and bulletin board server.
			C-MSS-06500	B	The SMC EMC shall provide, via the ECS data server, a MSS-MHW CI Enterprise Monitoring Server long-term data storage capability.
			C-MSS-06510	B	The SMC EMC shall provide, via the ECS data server, an MSS-MHW CI accounting and billing server long-term data storage capability.
			C-MSS-06600	B	The NSIDC LSM shall provide a MSS-MHW CI Local Management Server.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-06610	B	The NSIDC LSM MSS-MHW CI Local Management Server shall be configured with fixed disk, tape drive, and CD-ROM drive storage devices.
			C-MSS-06620	B	The NSIDC LSM shall provide a MSS-MHW CI Local Communications Server.
			C-MSS-06630	B	The NSIDC LSM MSS-MHW CI Local Communications Server shall be configured with fixed disk, tape drive, and CD-ROM drive storage devices.
			C-MSS-06640	B	The NSIDC LSM MSS-MHW CI Local Communications Server shall provide storage that is cross-strapped with the Local Management Server.
			C-MSS-06650	B	The NSIDC LSM shall provide one MSS-MHW CI local management and local communications server.
			C-MSS-06660	B	The NSIDC LSM shall provide two (2) MSS-MHW CI Management Workstations, which can perform any EOC LSM function.
			C-MSS-06670	B	The NSIDC LSM shall provide a MSS-MHW CI system printer.
			C-MSS-06680	B	The NSIDC LSM shall provide a MSS-MHW CI dot-matrix printer.
			C-MSS-06690	B	The NSIDC infrastructure shall provide a NSIDC MSS-MHW CI LAN.
			C-MSS-07000	B	The ORNL LSM shall provide a MSS-MHW CI Local Management Server.
			C-MSS-07010	B	The ORNL LSM MSS-MHW CI Local Management Server shall be configured with fixed disk, tape drive, and CD-ROM drive storage devices.
			C-MSS-07020	B	The ORNL LSM shall provide a MSS-MHW CI Local Communications Server.
			C-MSS-07030	B	The ORNL LSM MSS-MHW CI Local Communications Server shall be configured with fixed disk, tape drive, and CD-ROM drive storage devices.
			C-MSS-07040	B	The ORNL LSM MSS-MHW CI Local Communications Server shall provide storage that is cross-strapped with the Local Management Server.
			C-MSS-07050	B	The ORNL LSM shall provide a MSS-MHW CI Data Storage Unit supporting RAID level 5 cross strapped between the local management and local communications servers.
			C-MSS-07060	B	The ORNL LSM shall provide two (2) MSS-MHW CI Management Workstations, which can perform any EOC LSM function.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-07070	B	The ORNL LSM shall provide a MSS-MHW CI system printer.
			C-MSS-07080	B	The ORNL LSM shall provide a MSS-MHW CI dot-matrix printer.
			C-MSS-07090	B	The ORNL infrastructure shall provide an ORNL MSS-MHW CI LAN.
			C-MSS-06810	B	The ASF LSM MSS-MHW CI Local Management Server shall be configured with fixed disk, tape drive, and CD-ROM drive storage devices.
			C-MSS-06800	B	The ASF LSM shall provide a MSS-MHW CI Local Management Server.
			C-MSS-06820	B	The ASF LSM shall provide a MSS-MHW CI Local Communications Server.
			C-MSS-06830	B	The ASF LSM MSS-MHW CI Local Communications Server shall be configured with fixed disk, tape drive, and CD-ROM drive storage devices.
			C-MSS-06840	B	The ASF LSM MSS-MHW CI Local Communications Server shall provide storage that is cross-strapped with the Local Management Server.
			C-MSS-06850	B	The ASF LSM shall provide a MSS-MHW CI Data Storage Unit supporting RAID level 5 cross strapped between the local management and local communications servers.
			C-MSS-06860	B	The ASF LSM shall provide two (2) MSS-MHW CI Management Workstations, which can perform any LSM function.
			C-MSS-06870	B	The ASF LSM shall provide a MSS-MHW CI system printer.
			C-MSS-06880	B	The ASF LSM shall provide a MSS-MHW CI dot-matrix printer.
			C-MSS-06890	B	The ASF infrastructure shall provide a ASF MSS-MHW CI LAN.
EOSD4100#A	The ECS segments, elements, and components shall include the on-line (operational mode) and off-line (test mode) fault detection and isolation capabilities required to achieve the specified operational availability requirements.		C-MSS-16010	A	MSS Monitor/Control Service shall communicate via ECS management protocol with the Management Agent Service in test or operational mode.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-60390	A	The MSS Fault Management Application Service at the sites shall, for faults detected within its site, isolate, locate, and identify faults to the level of: a. subsystem b. equipment c. software
			C-MSS-60230	A	The MSS Fault Management Application Service shall have the capability of generating a notification within a maximum of five minutes of fault detection.
			C-MSS-36020	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to respond to requests for managed object MIB attributes
			C-MSS-36050	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to receive ECS management set message from the Monitor/Control Service.
			C-MSS-36040	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to send ECS management traps/events to the Monitor/Control Service.
			C-MSS-36060	IR1	The MSS Management Agent Service shall provide an ECS management agent that is configurable to include: a. Community to respond to and set attributes b. Agent location & contact person c. Traps to send d. Events to log & log file name
			C-MSS-36010	IR1	The MSS Management Agent Service shall retrieve data from ECS managed objects in test or operational mode.
			C-MSS-60380	IR1	The MSS Fault Management Application Service at the sites shall isolate, locate, and identify faults, identify subsystem, equipment and software faults, and identify the nature of the faults detected within its site.
			S-DPS-60520	A	The SPRHW CI elements and components shall include the on-line (operational mode) and off-line (test mode) fault detection and isolation capabilities required to achieve the specified operational availability requirements.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-02068	A	The MSS-MHCI elements and components shall include the on-line (operational mode) and off-line (test mode) fault detection and isolation capabilities required to achieve the specified operational availability requirements.
			C-CSS-02068	A	The CSS-DCHCI elements and components shall include the on-line (operational mode) and off-line (test mode) fault detection and isolation capabilities required to achieve the specified operational availability requirements.
			C-ISS-04160	A	The ISS elements and components shall include the on-line (operational mode) and off-line (test mode) fault detection and isolation capabilities required to achieve the specified operational availability requirements.
			S-DMS-60410	A	The DMGHW CI elements and components shall include the on-line (operational mode) and off-line (test mode) fault detection and isolation capabilities required to achieve the specified operational availability requirements.
			S-DSS-02046	A	The ACMHW CI elements and components shall include the on-line (operational mode) and off-line (test mode) fault detection and isolation capabilities required to achieve the specified operational availability requirements.
			S-DSS-31015	A	The DIPHW CI elements and components shall include the on-line (operational mode) and off-line (test mode) fault detection and isolation capabilities required to achieve the specified operational availability requirements.
			S-DSS-70080	A	The WKSHW CI elements and components shall include the on-line (operational mode) and off-line (test mode) fault detection and isolation capabilities required to achieve the specified operational availability requirements.
			S-DSS-21825	A	The DRPHW CI elements and components shall include the on-line (operational mode) and off-line (test mode) fault detection and isolation capabilities required to achieve the specified operational availability requirements.
			S-DPS-70085	A	The AITHW CI elements and components shall include the on-line (operational mode) and off-line (test mode) fault detection and isolation capabilities required to achieve the specified operational availability requirements.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DPS-80020	A	The AQAHW CI elements and components shall include the on-line (operational mode) and off-line (test mode) fault detection and isolation capabilities required to achieve the specified operational availability requirements.
			S-INS-60330	A	The ICLHW CI elements and components shall include the on-line (operational mode) and off-line (test mode) fault detection and isolation capabilities required to achieve the specified operational availability requirements.
			S-PLS-60450	A	The PLNHW CI elements and components shall include the on-line (operational mode) and off-line (test-mode) fault detection and isolation capabilities required to achieve the specified operational availability requirements.
			C-MSS-36070	IR1	The MSS Management Agent Service shall provide an ECS management agent for network devices
			C-MSS-60150	IR1	The MSS Fault Management Application Service shall have the capability to receive fault notifications from the Management Agent Service.
			S-INS-00510	A	The INGST CI shall provide the capability to select Ingest History Log entries for viewing by the following parameters: a. Ingest start/stop dates and times b. External Data Provider c. Data Type Identifier d. Final Service Request Status e. Test or operational mode
EOSD4100#B	The ECS segments, elements, and components shall include the on-line (operational mode) and off-line (test mode) fault detection and isolation capabilities required to achieve the specified operational availability requirements.		C-MSS-16010	A	MSS Monitor/Control Service shall communicate via ECS management protocol with the Management Agent Service in test or operational mode.
			C-MSS-60390	A	The MSS Fault Management Application Service at the sites shall, for faults detected within its site, isolate, locate, and identify faults to the level of: a. subsystem b. equipment c. software

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-60230	A	The MSS Fault Management Application Service shall have the capability of generating a notification within a maximum of five minutes of fault detection.
			C-MSS-36020	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to respond to requests for managed object MIB attributes
			C-MSS-36050	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to receive ECS management set message from the Monitor/Control Service.
			C-MSS-36040	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to send ECS management traps/events to the Monitor/Control Service.
			C-MSS-36060	IR1	The MSS Management Agent Service shall provide an ECS management agent that is configurable to include: a. Community to respond to and set attributes b. Agent location & contact person c. Traps to send d. Events to log & log file name
			C-MSS-36010	IR1	The MSS Management Agent Service shall retrieve data from ECS managed objects in test or operational mode.
			C-MSS-60380	IR1	The MSS Fault Management Application Service at the sites shall isolate, locate, and identify faults, identify subsystem, equipment and software faults, and identify the nature of the faults detected within its site.
			S-DPS-60520	A	The SPRHW CI elements and components shall include the on-line (operational mode) and off-line (test mode) fault detection and isolation capabilities required to achieve the specified operational availability requirements.
			C-MSS-02068	A	The MSS-MHCI elements and components shall include the on-line (operational mode) and off-line (test mode) fault detection and isolation capabilities required to achieve the specified operational availability requirements.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-CSS-02068	A	The CSS-DCHCI elements and components shall include the on-line (operational mode) and off-line (test mode) fault detection and isolation capabilities required to achieve the specified operational availability requirements.
			C-ISS-04160	A	The ISS elements and components shall include the on-line (operational mode) and off-line (test mode) fault detection and isolation capabilities required to achieve the specified operational availability requirements.
			S-DMS-60410	A	The DMGHW CI elements and components shall include the on-line (operational mode) and off-line (test mode) fault detection and isolation capabilities required to achieve the specified operational availability requirements.
			S-DSS-02046	A	The ACMHW CI elements and components shall include the on-line (operational mode) and off-line (test mode) fault detection and isolation capabilities required to achieve the specified operational availability requirements.
			S-DSS-31015	A	The DIPHW CI elements and components shall include the on-line (operational mode) and off-line (test mode) fault detection and isolation capabilities required to achieve the specified operational availability requirements.
			S-DSS-70080	A	The WKSHW CI elements and components shall include the on-line (operational mode) and off-line (test mode) fault detection and isolation capabilities required to achieve the specified operational availability requirements.
			S-DSS-21825	A	The DRPHW CI elements and components shall include the on-line (operational mode) and off-line (test mode) fault detection and isolation capabilities required to achieve the specified operational availability requirements.
			S-DPS-70085	A	The AITHW CI elements and components shall include the on-line (operational mode) and off-line (test mode) fault detection and isolation capabilities required to achieve the specified operational availability requirements.
			S-DPS-80020	A	The AQAHW CI elements and components shall include the on-line (operational mode) and off-line (test mode) fault detection and isolation capabilities required to achieve the specified operational availability requirements.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-INS-60330	A	The ICLHW CI elements and components shall include the on-line (operational mode) and off-line (test mode) fault detection and isolation capabilities required to achieve the specified operational availability requirements.
			S-PLS-60450	A	The PLNHW CI elements and components shall include the on-line (operational mode) and off-line (test-mode) fault detection and isolation capabilities required to achieve the specified operational availability requirements.
			S-INS-03200	B	The INGST CI shall be capable of operating in an off-line (test) mode.
			S-INS-03210	B	The INGST CI shall be capable of accessing test data sets when operating in off-line (test) mode.
			S-INS-60660	B	The ICLHW CI shall include the on-line (operational mode) and off-line (test mode) fault detection and isolation capabilities required to achieve the specified operational availability requirements.
			C-MSS-36070	IR1	The MSS Management Agent Service shall provide an ECS management agent for network devices
			C-MSS-60150	IR1	The MSS Fault Management Application Service shall have the capability to receive fault notifications from the Management Agent Service.
			S-INS-00510	A	The INGST CI shall provide the capability to select Ingest History Log entries for viewing by the following parameters: a. Ingest start/stop dates and times b. External Data Provider c. Data Type Identifier d. Final Service Request Status e. Test or operational mode
EOSD5000#A	ECS shall enable the addition of other data providers, e.g. DAACs, SCFs, ADCs, ODCs, which may: - provide heterogeneous services, i.e. services in support of EOS which may be less than or different than ECS services. - be connected with varying topologies - have variable levels of reliability or operational availability.		C-MSS-10030	A	The MSS shall interface with the Science Computing Facility (SCF) to exchange data identified in Table 5.1-1 as specified in ECS/SCF IRD, 194-219-SE1-005.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-HRD-39000	A	The ISS-INHCI DAAC LANs shall provide transparent portability across heterogeneous site LAN architectures.
			S-IOS-00080	A	The ADSRV CI shall provide a capability to access Advertisements for ECS and non-ECS data and services.
			S-IOS-00230	A	The ADSRV CI shall provide the capability to add, delete, or modify individual Advertisements.
			C-CSS-00030	A	The CSS services shall be extensible in its design to provide capability for growth and enhancement.
EOSD5000#B	ECS shall enable the addition of other data providers, e.g. DAACs, SCFs, ADCs, ODCs, which may: - provide heterogeneous services, i.e. services in support of EOS which may be less than or different than ECS services. - be connected with varying topologies - have variable levels of reliability or operational availability.		S-IOS-00080	A	The ADSRV CI shall provide a capability to access Advertisements for ECS and non-ECS data and services.
			S-IOS-00230	A	The ADSRV CI shall provide the capability to add, delete, or modify individual Advertisements.
			C-CSS-00030	A	The CSS services shall be extensible in its design to provide capability for growth and enhancement.
EOSD5010#A	ECS shall enable extended provider support, i.e. client access of data and services at SCFs and DAACs, as authorized, without distinction to the client.		C-CSS-00510	A	The CSS shall provide access to ECS data and services to the clients at the DAACs and SCFs without distinction using ECS provided software.
			S-CLS-10720	A	Registered users shall be able to obtain ECS data and services via their corresponding interfaces in the WKBCH CI, provided that the users are authorized for the specific services and/or data.
			S-CLS-10910	A	The WKBCH CI shall provide users the capability to transparently search across any combination of Data Servers for stored EOSDIS Data Granules.
			S-CLS-10690	A	The WKBCH CI shall provide users the capability to access Advertisements describing non-ECS data and services.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-10700	A	The WKBCH CI shall provide the user the capability to locate non-ECS data and services interoperable with ECS.
EOSD5010#B	ECS shall enable extended provider support, i.e. client access of data and services at SCFs and DAACs, as authorized, without distinction to the client.		C-CSS-00510	A	The CSS shall provide access to ECS data and services to the clients at the DAACs and SCFs without distinction using ECS provided software.
			S-CLS-10720	A	Registered users shall be able to obtain ECS data and services via their corresponding interfaces in the WKBCH CI, provided that the users are authorized for the specific services and/or data.
			S-CLS-10910	A	The WKBCH CI shall provide users the capability to transparently search across any combination of Data Servers for stored EOSDIS Data Granules.
			S-CLS-10690	A	The WKBCH CI shall provide users the capability to access Advertisements describing non-ECS data and services.
			S-CLS-10700	A	The WKBCH CI shall provide the user the capability to locate non-ECS data and services interoperable with ECS.
			S-CLS-00450	B	The DESKT CI shall provide users the capability to install an application interface (i.e., an application and its parameterized interface description).
			S-CLS-10730	B	The WKBCH CI shall provide users the capability to search data dictionary information to obtain the precise definitions of terms used within ECS.
			S-INS-00187	B	The INGST CI shall access the Advertising service to determine the availability of a Network Ingest Request service for a given Data Type Identifier.
			S-INS-00234	B	The INGST CI shall access the Advertising service to determine the availability of a Document Ingest Request service for a given Data Type Identifier.
			S-INS-00321	B	The INGST CI shall advertise available Interactive Network Ingest services.
EOSD5020#A	ECS software, hardware, and interfaces shall enable transparent portability across heterogeneous site architectures, i.e. performing the same function at different ECS sites that may have different hardware implementations.		C-MSS-90160	A	The DBMS shall support features in compliance with X/Open environment to include the following: a. Hardware independence b. Operating systems independence c. Network protocols independence

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-HRD-11015	A	The Enterprise Monitoring Server shall host the MSS software configuration items to create, with the Enterprise Communications Server and Management Workstations, an enterprise monitoring and coordination center for the ECS.
			C-HRD-12015	A	The Local Management Server shall host the MSS software configuration items to create, with the Local Communications Server and Management Workstations, a local system management center for each ECS DAAC.
			C-HRD-21015	A	The Enterprise Communications Server shall host the CSS software configuration items to create, with the Enterprise Monitoring Server and Management Workstations, an enterprise monitoring and coordination center for the ECS.
			C-HRD-22015	A	The Local Communications Server shall host the CSS software configuration items to create, with the Local Management Server and Management Workstations, a local system management center for each ECS DAAC.
			C-HRD-22115	A	The Local Communications Server processor shall have the capability to support a POSIX compliant IEEE 1003.1 operating system (UNIX).
			C-HRD-22300	A	The Local Communications Server data storage shall be compatible with POSIX compliant operating systems from several vendors.
			C-HRD-39000	A	The ISS-INHCI DAAC LANs shall provide transparent portability across heterogeneous site LAN architectures.
			S-IOS-60110	A	The operating system for each Unix platform in the ADSHW CI shall conform to the POSIX.2 standard.
			S-IOS-60120	A	The ADSHW CI POSIX.2 compliant platform shall have the following utilities installed at a minimum: perl, emacs, gzip, tar, imake, prof, gprof, nm.
			S-IOS-60130	A	The ADSHW CI POSIX.2 compliant platform shall have the following POSIX.2 user Portability Utilities installed at a minimum: man, vi.
			S-IOS-60140	A	The ADSHW CI POSIX.2 compliant platform shall have the following POSIX.2 Software Development Utilities installed at a minimum: make.
			S-IOS-60150	A	The ADSHW CI POSIX.2 compliant platform shall have the following POSIX.2 C-Language Development Utilities installed at a minimum: lex, yacc.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-IOS-60160	A	The ADSHW CI POSIX.2 compliant platform shall have the following Unix shells installed at a minimum: C shell, Bourne shell, Korn shell.
			S-IOS-60170	A	The ADSHW CI POSIX.2 compliant platform shall have on-line documentation or printed documentation for each installed tool.
			S-IOS-60180	A	The ADSHW CI POSIX.2 compliant platform shall have installed one or more development environment supporting the following languages: a. C b. FORTRAN-77
			S-IOS-60190	A	Each development environment associated with the POSIX.2 compliant platform in the ADSHW CI shall have the capability to compile and link strictly conformant POSIX-compliant source code.
			S-IOS-60195	A	Each development environment associated with the POSIX.2 compliant platform in the ADSHW CI shall have an interactive source level debugger for ECS supported languages.
			S-DMS-30510	A	The GTWAY CI shall provide an application program interface for the submission of requests for administrative services.
			S-DMS-60110	A	The operating system for each Unix platform in the DMGHW CI shall conform to the POSIX.2 standard.
			S-DMS-60120	A	The DMGHW CI POSIX.2 compliant platform shall have the following utilities installed at a minimum: perl, emacs, gzip, tar, imake, prof, gprof, nm.
			S-DMS-60130	A	The DMGHW CI POSIX.2 compliant platform shall have the following POSIX.2 user Portability Utilities installed at a minimum: man, vi.
			S-DMS-60140	A	The DMGHW CI POSIX.2 compliant platform shall have the following POSIX.2 Software Development Utilities installed at a minimum: make.
			S-DMS-60150	A	The DMGHW CI POSIX.2 compliant platform shall have the following POSIX.2 C-Language Development Utilities installed at a minimum: lex, yacc.
			S-DMS-60160	A	The DMGHW CI POSIX.2 compliant platform shall have the following Unix shells installed at a minimum: C shell, Bourne shell, Korn shell.
			S-DMS-60170	A	The DMGHW CI POSIX.2 compliant platform shall have on-line documentation or printed documentation for each installed tool.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-60180	A	The DMGHW CI POSIX.2 compliant platform shall have installed one or more development environment supporting the following languages: a. C b. FORTRAN-77
			S-DMS-60190	A	Each development environment associated with the POSIX.2 compliant platform in the DMGHW CI shall have the capability to compile and link strictly conformant POSIX-compliant source code.
			S-DMS-60195	A	Each development environment associated with the POSIX.2 compliant platform in the DMGHW CI shall have an interactive source level debugger for ECS supported languages.
			S-DSS-60110	A	The operating system for each Unix platform in the ACMHW CI shall conform to the POSIX.2 standard.
			S-DSS-60120	A	The ACMHW CI POSIX.2 compliant platform shall have the following utilities installed at a minimum: perl, emacs, gzip, tar, imake, prof, gprof, nm.
			S-DSS-60130	A	The ACMHW CI POSIX.2 compliant platform shall have the following POSIX.2 user Portability Utilities installed at a minimum: man, vi.
			S-DSS-60140	A	The ACMHW CI POSIX.2 compliant platform shall have the following POSIX.2 Software Development Utilities installed at a minimum: make.
			S-DSS-60150	A	The ACMHW CI POSIX.2 compliant platform shall have the following POSIX.2 C-Language Development Utilities installed at a minimum: lex, yacc.
			S-DSS-60160	A	The ACMHW CI POSIX.2 compliant platform shall have the following Unix shells installed at a minimum: C shell, Bourne shell, Korn shell.
			S-DSS-60170	A	The ACMHW CI POSIX.2 compliant platform shall have on-line documentation or printed documentation for each installed tool.
			S-DSS-60180	A	The ACMHW CI POSIX.2 compliant platform shall have installed one or more development environment supporting the following languages: a. C b. FORTRAN-77
			S-DSS-60190	A	Each development environment associated with the POSIX.2 compliant platform in the ACMHW CI shall have the capability to compile and link strictly conformant POSIX-compliant source code.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DSS-60195	A	Each development environment associated with the POSIX.2 compliant platform in the ACMHW CI shall have an interactive source level debugger for ECS supported languages.
			S-DSS-80110	A	The operating system for each Unix platform in the DRPHW CI shall conform to the POSIX.2 standard.
			S-DSS-80120	A	The DRPHW CI POSIX.2 compliant platform shall have the following utilities installed at a minimum: perl, emacs, gzip, tar, imake, prof, gprof, nm.
			S-DSS-80130	A	The DRPHW CI POSIX.2 compliant platform shall have the following POSIX.2 user Portability Utilities installed at a minimum: man, vi.
			S-DSS-80140	A	The DRPHW CI POSIX.2 compliant platform shall have the following POSIX.2 Software Development Utilities installed at a minimum: make.
			S-DSS-80150	A	The DRPHW CI POSIX.2 compliant platform shall have the following POSIX.2 C-Language Development Utilities installed at a minimum: lex, yacc.
			S-DSS-80160	A	The DRPHW CI POSIX.2 compliant platform shall have the following Unix shells installed at a minimum: C shell, Bourne shell, Korn shell.
			S-DSS-80170	A	The DRPHW CI POSIX.2 compliant platform shall have on-line documentation or printed documentation for each installed tool.
			S-DSS-80180	A	The DRPHW CI POSIX.2 compliant platform shall have installed one or more development environment supporting the following languages: a. C b. FORTRAN-77
			S-DSS-80190	A	Each development environment associated with the POSIX.2 compliant platform in the DRPHW CI shall have the capability to compile and link strictly conformant POSIX-compliant source code.
			S-DSS-80195	A	Each development environment associated with the POSIX.2 compliant platform in the DRPHW CI shall have an interactive source level debugger for ECS supported languages.
			S-DSS-90110	A	The operating system for each Unix platform in the DIPHW CI shall conform to the POSIX.2 standard.
			S-DSS-90120	A	The DIPHW CI POSIX.2 compliant platform shall have the following utilities installed at a minimum: perl, emacs, gzip, tar, imake, prof, gprof, nm.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DSS-90130	A	The DIPHW CI POSIX.2 compliant platform shall have the following POSIX.2 user Portability Utilities installed at a minimum: man, vi.
			S-DSS-90140	A	The DIPHW CI POSIX.2 compliant platform shall have the following POSIX.2 Software Development Utilities installed at a minimum: make.
			S-DSS-90150	A	The DIPHW CI POSIX.2 compliant platform shall have the following POSIX.2 C-Language Development Utilities installed at a minimum: lex, yacc.
			S-DSS-90160	A	The DIPHW CI POSIX.2 compliant platform shall have the following Unix shells installed at a minimum: C shell, Bourne shell, Korn shell.
			S-DSS-90170	A	The DIPHW CI POSIX.2 compliant platform shall have on-line documentation or printed documentation for each installed tool.
			S-DSS-90180	A	The DIPHW CI POSIX.2 compliant platform shall have installed one or more development environment supporting the following languages: a. C b. FORTRAN-77
			S-DSS-90190	A	Each development environment associated with the POSIX.2 compliant platform in the DIPHW CI shall have the capability to compile and link strictly conformant POSIX-compliant source code.
			S-DSS-90195	A	Each development environment associated with the POSIX.2 compliant platform in the DIPHW CI shall have an interactive source level debugger for ECS supported languages.
			S-INS-60810	IR1	The operating system for each UNIX platform in the ICLHW CI shall conform to the POSIX.2 standard.
			S-INS-60820	IR1	The ICLHW CI POSIX.2 compliant platform shall have the following utilities installed at a minimum: perl, emacs, gzip, tar, imake, prof, gprof, nm.
			S-INS-60830	IR1	The ICLHW CI POSIX.2 compliant platform shall have the following POSIX.2 user Portability Utilities installed at a minimum: man, vi.
			S-INS-60840	IR1	The ICLHW CI POSIX.2 compliant platform shall have the following POSIX.2 Software Development Utilities installed at a minimum: make.
			S-INS-60850	IR1	The ICLHW CI POSIX.2 compliant platform shall have the following POSIX.2 C-Language Development Utilities installed at a minimum: lex, yacc.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-INS-60860	IR1	The ICLHW CI POSIX.2 compliant platform shall have the following Unix shells installed at a minimum: C shell, Bourne shell, Korn shell.
			S-INS-60870	IR1	The ICLHW CI POSIX.2 compliant platform shall have on-line documentation or printed documentation for each installed tool.
			S-INS-60880	IR1	The ICLHW CI POSIX.2 compliant platform shall have installed one or more development environment supporting the following languages: a. C b. C++
			S-INS-60890	IR1	Each development environment associated with the POSIX.2 compliant platform in the ICLHW CI shall have the capability to compile and link strictly conformant POSIX-compliant source code.
			S-INS-60895	IR1	Each development environment associated with the POSIX.2 compliant platform in the ICLHWCI shall have an interactive source level debugger for ECS supported languages.
			S-DPS-70220	IR1	Each development environment associated with the POSIX.2 compliant platform in the AITHW CI shall have the capability to compile and link strictly conformant POSIX-compliant source code.
			S-DPS-70240	IR1	Each development environment associated with the POSIX.2 compliant platform in the AITHW CI shall have an interactive source level debugger for ECS supported languages.
			S-DPS-70250	IR1	Each development environment associated with the POSIX.2 compliant platform in the AITHW CI shall have a screen capture utility.
			S-DPS-80110	A	The operating system for each UNIX platform in the AQAHW CI shall conform to the POSIX.2 standard.
			S-DPS-80120	A	The AQAHW CI POSIX.2 compliant platform shall have the following utilities installed at a minimum: perl, emacs, gzip, tar, imake, prof, gprof, nm.
			S-DPS-80130	A	The AQAHW CI POSIX.2 compliant platform ishall have the following POSIX.2 User Portability Utilities installed at a minmum: man, vi.
			S-DPS-80140	A	The AQAHW CI POSIX.2 compliant platform shall have the following POSIX.2 Software Development Utilities installed at a minimum: make.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DPS-80150	A	The AQAHW CI POSIX.2 compliant platform shall have the following Unix shells installed at a minimum: C shell, Bourne shell, Korn shell.
			S-DPS-70130	IR1	The AITHW CI POSIX.2 compliant platform ishall have the following POSIX.2 User Portability Utilities installed at a minmum: man, vi.
			S-DPS-70120	IR1	The AITHW CI POSIX.2 compliant platform shall have the following utilities installed at a minimum: perl, emacs, gzip, tar, imake, prof, gprof, nm.
			S-DPS-70110	IR1	The operating system for each UNIX platform in the AITHW CI shall conform to the POSIX.2 standard.
			S-DPS-61177	IR1	The SPRHW CI POSIX.2 compliant platform supporting AI&T of CERES S/W shall have installed an ADA development environment.
			S-DPS-70140	IR1	The AITHW CI POSIX.2 compliant platform shall have the following POSIX.2 Software Development Utilities installed at a minimum: make.
			S-DPS-70150	IR1	The AITHW CI POSIX.2 compliant platform shall have the following POSIX.2 C-Language Development Utilities installed at a minimum: lex, yacc.
			S-DPS-70160	IR1	The AITHW CI POSIX.2 compliant platform shall have the following Unix shells installed at a minimum: C shell, Bourne shell, Korn shell.
			S-DPS-70180	IR1	The AITHW CI shall have provision for a dynamic analyzer to support the capability to check Science Software source code for memory leaks.
			S-DPS-70190	IR1	The AITHW CI POSIX.2 compliant platform shall have installed one or more development environment supporting the following languages: a. C b. C++ c. FORTRAN 77 d. FORTRAN 90
			S-DPS-61110	IR1	The operating system for each Unix platform in the SPRHW CI shall conform to the POSIX.2 standard.
			S-DMS-30500	A	The GTWAY CI shall provide for the submission of Service Requests.
			C-CSS-00040	IR1	The CSS services shall be compatible with POSIX-compliant Unix platforms.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-HRD-11115	IR1	The Enterprise Monitoring Server processor shall have the capability to support a POSIX compliant IEEE 1003.1 operating system (UNIX).
			C-HRD-11300	IR1	The Enterprise Monitoring Server data storage shall be compatible with POSIX compliant operating systems from several vendors.
			C-HRD-12115	IR1	The Local Management Server processor shall have the capability to support a POSIX compliant IEEE 1003.1 operating system (UNIX).
			C-HRD-12300	IR1	The Local Management Server data storage shall be compatible with POSIX compliant operating systems from several vendors.
			C-HRD-21115	IR1	The Enterprise Communications Server processor shall have the capability to support a POSIX compliant IEEE 1003.1 operating system (UNIX).
			C-HRD-21300	IR1	The Enterprise Communications Server data storage shall be compatible with POSIX compliant operating systems from several vendors.
			C-HRD-23115	IR1	The Bulletin Board Server processor shall have the capability to support a POSIX compliant IEEE 1003.1 operating system (UNIX).
			C-HRD-23300	IR1	The Bulletin Board Server data storage shall be compatible with POSIX compliant operating systems from several vendors.
			S-DPS-70230	IR1	Each development environment associated with the POSIX.2 compliant platform in the AITHW CI shall have the capability to compile and link source code containing extensions specified in the Data Production S/W and SCF Standards and Guidelines.
EOSD5020#B	ECS software, hardware, and interfaces shall enable transparent portability across heterogeneous site architectures, i.e. performing the same function at different ECS sites that may have different hardware implementations.		C-MSS-90160	A	The DBMS shall support features in compliance with X/Open environment to include the following: a. Hardware independence b. Operating systems independence c. Network protocols independence
			S-IOS-60110	A	The operating system for each Unix platform in the ADSHW CI shall conform to the POSIX.2 standard.
			S-IOS-60120	A	The ADSHW CI POSIX.2 compliant platform shall have the following utilities installed at a minimum: perl, emacs, gzip, tar, imake, prof, gprof, nm.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-IOS-60130	A	The ADSHW CI POSIX.2 compliant platform shall have the following POSIX.2 user Portability Utilities installed at a minimum: man, vi.
			S-IOS-60140	A	The ADSHW CI POSIX.2 compliant platform shall have the following POSIX.2 Software Development Utilities installed at a minimum: make.
			S-IOS-60150	A	The ADSHW CI POSIX.2 compliant platform shall have the following POSIX.2 C-Language Development Utilities installed at a minimum: lex, yacc.
			S-IOS-60160	A	The ADSHW CI POSIX.2 compliant platform shall have the following Unix shells installed at a minimum: C shell, Bourne shell, Korn shell.
			S-IOS-60170	A	The ADSHW CI POSIX.2 compliant platform shall have on-line documentation or printed documentation for each installed tool.
			S-IOS-60180	A	The ADSHW CI POSIX.2 compliant platform shall have installed one or more development environment supporting the following languages: a. C b. FORTRAN-77
			S-IOS-60190	A	Each development environment associated with the POSIX.2 compliant platform in the ADSHW CI shall have the capability to compile and link strictly conformant POSIX-compliant source code.
			S-IOS-60195	A	Each development environment associated with the POSIX.2 compliant platform in the ADSHW CI shall have an interactive source level debugger for ECS supported languages.
			S-DMS-30510	A	The GTWAY CI shall provide an application program interface for the submission of requests for administrative services.
			S-DMS-60110	A	The operating system for each Unix platform in the DMGHW CI shall conform to the POSIX.2 standard.
			S-DMS-60120	A	The DMGHW CI POSIX.2 compliant platform shall have the following utilities installed at a minimum: perl, emacs, gzip, tar, imake, prof, gprof, nm.
			S-DMS-60130	A	The DMGHW CI POSIX.2 compliant platform shall have the following POSIX.2 user Portability Utilities installed at a minimum: man, vi.
			S-DMS-60140	A	The DMGHW CI POSIX.2 compliant platform shall have the following POSIX.2 Software Development Utilities installed at a minimum: make.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-60150	A	The DMGHW CI POSIX.2 compliant platform shall have the following POSIX.2 C-Language Development Utilities installed at a minimum: lex, yacc.
			S-DMS-60160	A	The DMGHW CI POSIX.2 compliant platform shall have the following Unix shells installed at a minimum: C shell, Bourne shell, Korn shell.
			S-DMS-60170	A	The DMGHW CI POSIX.2 compliant platform shall have on-line documentation or printed documentation for each installed tool.
			S-DMS-60180	A	The DMGHW CI POSIX.2 compliant platform shall have installed one or more development environment supporting the following languages: a. C b. FORTRAN-77
			S-DMS-60190	A	Each development environment associated with the POSIX.2 compliant platform in the DMGHW CI shall have the capability to compile and link strictly conformant POSIX-compliant source code.
			S-DMS-60195	A	Each development environment associated with the POSIX.2 compliant platform in the DMGHW CI shall have an interactive source level debugger for ECS supported languages.
			S-DSS-60110	A	The operating system for each Unix platform in the ACMHW CI shall conform to the POSIX.2 standard.
			S-DSS-60120	A	The ACMHW CI POSIX.2 compliant platform shall have the following utilities installed at a minimum: perl, emacs, gzip, tar, imake, prof, gprof, nm.
			S-DSS-60130	A	The ACMHW CI POSIX.2 compliant platform shall have the following POSIX.2 user Portability Utilities installed at a minimum: man, vi.
			S-DSS-60140	A	The ACMHW CI POSIX.2 compliant platform shall have the following POSIX.2 Software Development Utilities installed at a minimum: make.
			S-DSS-60150	A	The ACMHW CI POSIX.2 compliant platform shall have the following POSIX.2 C-Language Development Utilities installed at a minimum: lex, yacc.
			S-DSS-60160	A	The ACMHW CI POSIX.2 compliant platform shall have the following Unix shells installed at a minimum: C shell, Bourne shell, Korn shell.
			S-DSS-60170	A	The ACMHW CI POSIX.2 compliant platform shall have on-line documentation or printed documentation for each installed tool.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DSS-60180	A	The ACMHW CI POSIX.2 compliant platform shall have installed one or more development environment supporting the following languages: a. C b. FORTRAN-77
			S-DSS-60190	A	Each development environment associated with the POSIX.2 compliant platform in the ACMHW CI shall have the capability to compile and link strictly conformant POSIX-compliant source code.
			S-DSS-60195	A	Each development environment associated with the POSIX.2 compliant platform in the ACMHW CI shall have an interactive source level debugger for ECS supported languages.
			S-DSS-80110	A	The operating system for each Unix platform in the DRPHW CI shall conform to the POSIX.2 standard.
			S-DSS-80120	A	The DRPHW CI POSIX.2 compliant platform shall have the following utilities installed at a minimum: perl, emacs, gzip, tar, imake, prof, gprof, nm.
			S-DSS-80130	A	The DRPHW CI POSIX.2 compliant platform shall have the following POSIX.2 user Portability Utilities installed at a minimum: man, vi.
			S-DSS-80140	A	The DRPHW CI POSIX.2 compliant platform shall have the following POSIX.2 Software Development Utilities installed at a minimum: make.
			S-DSS-80150	A	The DRPHW CI POSIX.2 compliant platform shall have the following POSIX.2 C-Language Development Utilities installed at a minimum: lex, yacc.
			S-DSS-80160	A	The DRPHW CI POSIX.2 compliant platform shall have the following Unix shells installed at a minimum: C shell, Bourne shell, Korn shell.
			S-DSS-80170	A	The DRPHW CI POSIX.2 compliant platform shall have on-line documentation or printed documentation for each installed tool.
			S-DSS-80180	A	The DRPHW CI POSIX.2 compliant platform shall have installed one or more development environment supporting the following languages: a. C b. FORTRAN-77
			S-DSS-80190	A	Each development environment associated with the POSIX.2 compliant platform in the DRPHW CI shall have the capability to compile and link strictly conformant POSIX-compliant source code.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DSS-80195	A	Each development environment associated with the POSIX.2 compliant platform in the DRPHW CI shall have an interactive source level debugger for ECS supported languages.
			S-DSS-90110	A	The operating system for each Unix platform in the DIPHW CI shall conform to the POSIX.2 standard.
			S-DSS-90120	A	The DIPHW CI POSIX.2 compliant platform shall have the following utilities installed at a minimum: perl, emacs, gzip, tar, imake, prof, gprof, nm.
			S-DSS-90130	A	The DIPHW CI POSIX.2 compliant platform shall have the following POSIX.2 user Portability Utilities installed at a minimum: man, vi.
			S-DSS-90140	A	The DIPHW CI POSIX.2 compliant platform shall have the following POSIX.2 Software Development Utilities installed at a minimum: make.
			S-DSS-90150	A	The DIPHW CI POSIX.2 compliant platform shall have the following POSIX.2 C-Language Development Utilities installed at a minimum: lex, yacc.
			S-DSS-90160	A	The DIPHW CI POSIX.2 compliant platform shall have the following Unix shells installed at a minimum: C shell, Bourne shell, Korn shell.
			S-DSS-90170	A	The DIPHW CI POSIX.2 compliant platform shall have on-line documentation or printed documentation for each installed tool.
			S-DSS-90180	A	The DIPHW CI POSIX.2 compliant platform shall have installed one or more development environment supporting the following languages: a. C b. FORTRAN-77
			S-DSS-90190	A	Each development environment associated with the POSIX.2 compliant platform in the DIPHW CI shall have the capability to compile and link strictly conformant POSIX-compliant source code.
			S-DSS-90195	A	Each development environment associated with the POSIX.2 compliant platform in the DIPHW CI shall have an interactive source level debugger for ECS supported languages.
			S-INS-60810	IR1	The operating system for each UNIX platform in the ICLHW CI shall conform to the POSIX.2 standard.
			S-INS-60820	IR1	The ICLHW CI POSIX.2 compliant platform shall have the following utilities installed at a minimum: perl, emacs, gzip, tar, imake, prof, gprof, nm.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-INS-60830	IR1	The ICLHW CI POSIX.2 compliant platform shall have the following POSIX.2 user Portability Utilities installed at a minimum: man, vi.
			S-INS-60840	IR1	The ICLHW CI POSIX.2 compliant platform shall have the following POSIX.2 Software Development Utilities installed at a minimum: make.
			S-INS-60850	IR1	The ICLHW CI POSIX.2 compliant platform shall have the following POSIX.2 C-Language Development Utilities installed at a minimum: lex, yacc.
			S-INS-60860	IR1	The ICLHW CI POSIX.2 compliant platform shall have the following Unix shells installed at a minimum: C shell, Bourne shell, Korn shell.
			S-INS-60870	IR1	The ICLHW CI POSIX.2 compliant platform shall have on-line documentation or printed documentation for each installed tool.
			S-INS-60880	IR1	The ICLHW CI POSIX.2 compliant platform shall have installed one or more development environment supporting the following languages: a. C b. C++
			S-INS-60890	IR1	Each development environment associated with the POSIX.2 compliant platform in the ICLHW CI shall have the capability to compile and link strictly conformant POSIX-compliant source code.
			S-INS-60895	IR1	Each development environment associated with the POSIX.2 compliant platform in the ICLHWCI shall have an interactive source level debugger for ECS supported languages.
			S-DPS-70220	IR1	Each development environment associated with the POSIX.2 compliant platform in the AITHW CI shall have the capability to compile and link strictly conformant POSIX-compliant source code.
			S-DPS-70240	IR1	Each development environment associated with the POSIX.2 compliant platform in the AITHW CI shall have an interactive source level debugger for ECS supported languages.
			S-DPS-70250	IR1	Each development environment associated with the POSIX.2 compliant platform in the AITHW CI shall have a screen capture utility.
			S-DPS-80110	A	The operating system for each UNIX platform in the AQAHW CI shall conform to the POSIX.2 standard.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DPS-80120	A	The AQAHW CI POSIX.2 compliant platform shall have the following utilities installed at a minimum: perl, emacs, gzip, tar, imake, prof, gprof, nm.
			S-DPS-80130	A	The AQAHW CI POSIX.2 compliant platform ishall have the following POSIX.2 User Portability Utilities installed at a minmum: man, vi.
			S-DPS-80140	A	The AQAHW CI POSIX.2 compliant platform shall have the following POSIX.2 Software Development Utilities installed at a minimum: make.
			S-DPS-80150	A	The AQAHW CI POSIX.2 compliant platform shall have the following Unix shells installed at a minimum: C shell, Bourne shell, Korn shell.
			S-DPS-70130	IR1	The AITHW CI POSIX.2 compliant platform ishall have the following POSIX.2 User Portability Utilities installed at a minmum: man, vi.
			S-DPS-70120	IR1	The AITHW CI POSIX.2 compliant platform shall have the following utilities installed at a minimum: perl, emacs, gzip, tar, imake, prof, gprof, nm.
			S-DPS-70110	IR1	The operating system for each UNIX platform in the AITHW CI shall conform to the POSIX.2 standard.
			S-DPS-61177	IR1	The SPRHW CI POSIX.2 compliant platform supporting AI&T of CERES S/W shall have installed an ADA development environment.
			S-DPS-70140	IR1	The AITHW CI POSIX.2 compliant platform shall have the following POSIX.2 Software Development Utilities installed at a minimum: make.
			S-DPS-70150	IR1	The AITHW CI POSIX.2 compliant platform shall have the following POSIX.2 C-Language Development Utilities installed at a minimum: lex, yacc.
			S-DPS-70160	IR1	The AITHW CI POSIX.2 compliant platform shall have the following Unix shells installed at a minimum: C shell, Bourne shell, Korn shell.
			S-DPS-70180	IR1	The AITHW CI shall have provision for a dynamic analyzer to support the capability to check Science Software source code for memory leaks.
			S-DPS-70190	IR1	The AITHW CI POSIX.2 compliant platform shall have installed one or more development environment supporting the following languages: a. C b. C++ c. FORTRAN 77 d. FORTRAN 90

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-CSS-02030	B	The CSS-DCHW CI Enterprise Communications Server shall host the CSS software configuration items to create, with the Enterprise Monitoring Server and Management Workstations, an enterprise monitoring and coordination center for the ECS.
			C-CSS-02130	B	The CSS-DCHW CI Enterprise Communications Server processor shall have the capability to support a POSIX compliant IEEE 1003.1 operating system (UNIX).
			C-CSS-02200	B	The CSS-DCHW CI Enterprise Communications Server data storage shall be compatible with POSIX compliant operating systems from several vendors.
			C-CSS-02630	B	The CSS-DCHW CI Local Communications Server shall host the CSS software configuration items to create, with the Local Management Server and Management Workstations, a local system management center for each ECS DAAC.
			C-CSS-02730	B	The CSS-DCHW CI Local Communications Server processor shall have the capability to support a POSIX compliant IEEE 1003.1 operating system (UNIX).
			C-CSS-02800	B	The CSS-DCHW CI Local Communications Server data storage shall be compatible with POSIX compliant operating systems from several vendors.
			C-CSS-03330	B	The CSS-DCHW CI Bulletin Board Server processor shall have the capability to support a POSIX compliant IEEE 1003.1 operating system (UNIX).
			C-CSS-03400	B	The CSS-DCHW CI Bulletin Board Server data storage shall be compatible with POSIX compliant operating systems from several vendors.
			C-MSS-02030	B	The MSS-MHW CI Enterprise Monitoring Server shall host the MSS software configuration items to create, with the Enterprise Communications Server and Management Workstations, an enterprise monitoring and coordination center for the ECS.
			C-MSS-02130	B	The MSS-MHW CI Enterprise Monitoring Server processor shall have the capability to support a POSIX compliant IEEE 1003.1 operating system (UNIX).
			C-MSS-02200	B	The MSS-MHW CI Enterprise Monitoring Server data storage shall be compatible with POSIX compliant operating systems from several vendors.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-02630	B	The MSS-MHW CI Local Management Server shall host the MSS software configuration items to create, with the Local Communications Server and Management Workstations, a local system management center for each ECS DAAC.
			C-MSS-02730	B	The MSS-MHW CI Local Management Server processor shall have the capability to support a POSIX compliant IEEE 1003.1 operating system (UNIX).
			C-MSS-02800	B	The MSS-MHW CI Local Management Server data storage shall be compatible with POSIX compliant operating systems from several vendors.
			S-DMS-21010	B	The DDICT CI shall provide an application program interface for the submission of requests for administrative services.
			S-DPS-61110	IR1	The operating system for each Unix platform in the SPRHW CI shall conform to the POSIX.2 standard.
			S-DMS-30500	A	The GTWAY CI shall provide for the submission of Service Requests.
			C-CSS-00040	IR1	The CSS services shall be compatible with POSIX-compliant Unix platforms.
			S-DPS-70230	IR1	Each development environment associated with the POSIX.2 compliant platform in the AITHW CI shall have the capability to compile and link source code containing extensions specified in the Data Production S/W and SCF Standards and Guidelines.
EOSD5020#Ir1	ECS software, hardware, and interfaces shall enable transparent portability across heterogeneous site architectures, i.e. performing the same function at different ECS sites that may have different hardware implementations.	IR1: Applies only to TRMM data ingest and algorithm I&T.	S-INS-60810	IR1	The operating system for each UNIX platform in the ICLHW CI shall conform to the POSIX.2 standard.
			S-INS-60820	IR1	The ICLHW CI POSIX.2 compliant platform shall have the following utilities installed at a minimum: perl, emacs, gzip, tar, imake, prof, gprof, nm.
			S-INS-60830	IR1	The ICLHW CI POSIX.2 compliant platform shall have the following POSIX.2 user Portability Utilities installed at a minimum: man, vi.
			S-INS-60840	IR1	The ICLHW CI POSIX.2 compliant platform shall have the following POSIX.2 Software Development Utilities installed at a minimum: make.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-INS-60850	IR1	The ICLHW CI POSIX.2 compliant platform shall have the following POSIX.2 C-Language Development Utilities installed at a minimum: lex, yacc.
			S-INS-60860	IR1	The ICLHW CI POSIX.2 compliant platform shall have the following Unix shells installed at a minimum: C shell, Bourne shell, Korn shell.
			S-INS-60870	IR1	The ICLHW CI POSIX.2 compliant platform shall have on-line documentation or printed documentation for each installed tool.
			S-INS-60880	IR1	The ICLHW CI POSIX.2 compliant platform shall have installed one or more development environment supporting the following languages: a. C b. C++
			S-INS-60890	IR1	Each development environment associated with the POSIX.2 compliant platform in the ICLHW CI shall have the capability to compile and link strictly conformant POSIX-compliant source code.
			S-INS-60895	IR1	Each development environment associated with the POSIX.2 compliant platform in the ICLHWCI shall have an interactive source level debugger for ECS supported languages.
			S-DPS-70220	IR1	Each development environment associated with the POSIX.2 compliant platform in the AITHW CI shall have the capability to compile and link strictly conformant POSIX-compliant source code.
			S-DPS-70240	IR1	Each development environment associated with the POSIX.2 compliant platform in the AITHW CI shall have an interactive source level debugger for ECS supported languages.
			S-DPS-70250	IR1	Each development environment associated with the POSIX.2 compliant platform in the AITHW CI shall have a screen capture utility.
			S-DPS-70130	IR1	The AITHW CI POSIX.2 compliant platform ishall have the following POSIX.2 User Portability Utilities installed at a minmum: man, vi.
			S-DPS-70120	IR1	The AITHW CI POSIX.2 compliant platform shall have the following utilities installed at a minimum: perl, emacs, gzip, tar, imake, prof, gprof, nm.
			S-DPS-70110	IR1	The operating system for each UNIX platform in the AITHW CI shall conform to the POSIX.2 standard.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DPS-61177	IR1	The SPRHW CI POSIX.2 compliant platform supporting AI&T of CERES S/W shall have installed an ADA development environment.
			S-DPS-70140	IR1	The AITHW CI POSIX.2 compliant platform shall have the following POSIX.2 Software Development Utilities installed at a minimum: make.
			S-DPS-70150	IR1	The AITHW CI POSIX.2 compliant platform shall have the following POSIX.2 C-Language Development Utilities installed at a minimum: lex, yacc.
			S-DPS-70160	IR1	The AITHW CI POSIX.2 compliant platform shall have the following Unix shells installed at a minimum: C shell, Bourne shell, Korn shell.
			S-DPS-70180	IR1	The AITHW CI shall have provision for a dynamic analyzer to support the capability to check Science Software source code for memory leaks.
			S-DPS-70190	IR1	The AITHW CI POSIX.2 compliant platform shall have installed one or more development environment supporting the following languages: a. C b. C++ c. FORTRAN 77 d. FORTRAN 90
			S-DPS-61110	IR1	The operating system for each Unix platform in the SPRHW CI shall conform to the POSIX.2 standard.
			C-CSS-00040	IR1	The CSS services shall be compatible with POSIX-compliant Unix platforms.
			C-HRD-11115	IR1	The Enterprise Monitoring Server processor shall have the capability to support a POSIX compliant IEEE 1003.1 operating system (UNIX).
			C-HRD-11300	IR1	The Enterprise Monitoring Server data storage shall be compatible with POSIX compliant operating systems from several vendors.
			C-HRD-12115	IR1	The Local Management Server processor shall have the capability to support a POSIX compliant IEEE 1003.1 operating system (UNIX).
			C-HRD-12300	IR1	The Local Management Server data storage shall be compatible with POSIX compliant operating systems from several vendors.
			C-HRD-21115	IR1	The Enterprise Communications Server processor shall have the capability to support a POSIX compliant IEEE 1003.1 operating system (UNIX).

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-HRD-21300	IR1	The Enterprise Communications Server data storage shall be compatible with POSIX compliant operating systems from several vendors.
			C-HRD-23115	IR1	The Bulletin Board Server processor shall have the capability to support a POSIX compliant IEEE 1003.1 operating system (UNIX).
			C-HRD-23300	IR1	The Bulletin Board Server data storage shall be compatible with POSIX compliant operating systems from several vendors.
			S-DPS-61174	IR1	Each development environment associated with the POSIX.2 compliant platform in the SPRHW CI shall have the capability to compile and link source code containing extensions specified in the Data Production S/W and SCF Standards and Guidelines.
			S-DPS-70230	IR1	Each development environment associated with the POSIX.2 compliant platform in the AITHW CI shall have the capability to compile and link source code containing extensions specified in the Data Production S/W and SCF Standards and Guidelines.
EOSD5030#A	ECS shall enable the addition of information search and retrieval services, e.g. WAIS, WWW.	A: Will provide WWW interface advertising service.	S-CLS-01480	A	The DESKT CI shall utilize an X-windows windowing interface for the GUI.
			S-CLS-10770	A	The WKBCH CI shall support hierarchical searching of documents in HTML format.
EOSD5030#B	ECS shall enable the addition of information search and retrieval services, e.g. WAIS, WWW.		C-CSS-65020	B	The CSS Secure Web service shall support at a minimum the GET and POST HTTP methods.
			C-CSS-65030	B	The CSS Secure Web service shall provide a registration interface for the user to register documents to the web server.
			C-CSS-65100	B	The CSS Secure Web service shall provide an API that will support the porting of existing applications to the DCE environment.
			C-CSS-65140	B	The CSS Secure Web service shall provide a mechanism for non- DCE browsers to view non-secured documents on the web server.
			C-CSS-65150	B	The CSS Secure Web service shall provide a mechanism or DCE capable browser to view non-secured and secured documents on the web server.
			C-CSS-65220	B	The CSS Secure Web service shall be based on the HTTP protocol for message passing.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-00450	B	The DESKT CI shall provide users the capability to install an application interface (i.e., an application and its parameterized interface description).
			S-CLS-01480	A	The DESKT CI shall utilize an X-windows windowing interface for the GUI.
			S-CLS-10770	A	The WKBCH CI shall support hierarchical searching of documents in HTML format.
EOSD5040#A	ECS shall enable the combination of services from ECS and other data providers in arbitrary, i.e. non-predefined, ways as needed by users to conduct EOS science.	The client subsystem allows a user to select which services he wishes to use, integrate his own services, and use the services in any order the user wishes.	S-CLS-10650	A	The WKBCH CI shall provide the user the capability to identify Data and services provided by ECS.
EOSD5040#B	ECS shall enable the combination of services from ECS and other data providers in arbitrary, i.e. non-predefined, ways as needed by users to conduct EOSscience.	The client subsystem allows a user to select which services he wishes to use, integrate his own services, and use the services in any order the user wishes.	S-CLS-10650	A	The WKBCH CI shall provide the user the capability to identify Data and services provided by ECS.
			S-CLS-00290	B	The DESKT CI shall provide users the capability to bind a service to a desktop object.
			S-CLS-00295	B	The DESKT CI shall provide users the capability to unbind a service from a desktop object.
			S-CLS-00300	B	The DESKT CI shall provide users the capability to invoke any service bound to a desktop object.
			S-CLS-00310	B	The DESKT CI shall provide users the capability to generate an exchangeable (i.e., file based) form for desktop objects.
			S-CLS-00320	B	The DESKT CI shall provide users the capability to generate a desktop object from an externalized (i.e., file-based) format.
			S-CLS-00350	B	The DESKT CI shall provide users the capability to iteratively apply operations to each of the objects in a desktop container.
			S-CLS-00450	B	The DESKT CI shall provide users the capability to install an application interface (i.e., an application and its parameterized interface description).
			S-CLS-00460	B	The DESKT CI shall provide users the capability to remove an application interface.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-00470	B	The DESKT CI shall provide users the capability to obtain the attributes associated with an application interface.
			S-CLS-00490	B	The DESKT CI shall provide users the capability to modify the attributes associated with an application interface.
			S-CLS-01550	B	The DESKT CI shall provide the user the capability to copy ECS services onto his desktop, iconize them, and save them as desktop objects.
			S-CLS-01560	B	The DESKT CI shall provide the user the capability to access a service via the previously saved desktop object representing that service.
			S-CLS-10210	B	The WKBCH CI shall provide users the capability to search for Science Processing Library holdings
EOSD5060#B	ECS shall enable interoperability with equivalent International systems, e.g. European and Japanese systems, to support the following: a). Browse services b). Data retrieval services.		S-CLS-00450	B	The DESKT CI shall provide users the capability to install an application interface (i.e., an application and its parameterized interface description).
			S-CLS-10730	B	The WKBCH CI shall provide users the capability to search data dictionary information to obtain the precise definitions of terms used within ECS.
EOSD5070#A	ECS shall enable expansion to GByte networks including the ability to provide increased volume of data distribution/access..		C-ISS-06000	A	The ISS network architecture shall enable expansion to GByte networks including the ability to provide increased volume of data distribution/access.
			C-HRD-39005	A	The ISS-INHCI DAAC LANs shall enable expansion to GByte networks including the ability to provide increased volume of data distribution and access.
EOSD5070#B	ECS shall enable expansion to GByte networks including the ability to provide increased volume of data distribution/access.		C-ISS-06000	A	The ISS network architecture shall enable expansion to GByte networks including the ability to provide increased volume of data distribution/access.
			C-ISS-02610	B	The ISS-INHW CI DAAC LANs shall enable expansion to GByte networks including the ability to provide increased volume of data distribution and access.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
EOSD5100#B	ECS shall enable evolution of ECS to be a federated unit within GCDIS, e.g. GCDIS data centers should not have to negotiate different interfaces with each DAAC.		C-MSS-00030	A	The MSS services shall be extensible in its design to provide capability for growth and enhancement.
			C-ISS-02600	B	The ISS-INHW CI DAAC LANs shall provide transparent portability across heterogeneous site LAN architectures.
			S-DMS-10010	B	The DIMGR CI shall provide capabilities to search and obtain data across DAACs.
			S-DMS-10020	B	The DIMGR CI shall accept and execute Search Requests which require searching across DAACs.
			S-DMS-10650	B	The DIMGR CI shall initiate distributed data access and manipulation operations.
EOSD5110#A	ECS shall enable the separate use of data management, data processing, or data archive and distribution software components by a GCDIS data center. The GCDIS data centers will have full responsibility for integration of those components within their environment. Interfaces between the components must be developed to serve the mission of EOSDIS, but be made available for a GCDIS data center.	The segment design specification will discuss compliance in DID 305/DV2. Additional demonstration of compliance will be documented in updates to DID 313/DV3 and 207/SE1.	S-DSS-20010	A	The STMGT CI shall validate all Service Requests.
			S-PLS-01610	A	The PLANG CI shall be developed with configuration controlled APIs that will be capable of supporting development and integration of new algorithms developed at DAAC to support DAAC value-added production.
EOSD5110#B	ECS shall enable the separate use of data management, data processing, or data archive and distribution software components by a GCDIS data center. The GCDIS data centers will have full responsibility for integration of those components within their environment. Interfaces between the components must be developed to serve the mission of EOSDIS, but be made available for a GCDIS data center.	The segment design specification will discuss compliance in DID 305/DV2. Additional demonstration of compliance will be documented in updates to DID 313/DV3 and 207/SE1.	S-DSS-20010	A	The STMGT CI shall validate all Service Requests.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-PLS-01610	A	The PLANG CI shall be developed with configuration controlled APIs that will be capable of supporting development and integration of new algorithms developed at DAAC to support DAAC value-added production.
			S-DSS-00250	B	The SDSRV CI shall provide an application program interface for the submission of Service Requests.
			S-DSS-00260	B	The SDSRV CI shall provide an application program interface for the submission of requests for administrative services.
			S-DSS-21280	B	The SDSRV CI shall provide application programming interfaces (APIs) to support Insert Requests.
			S-DSS-21290	B	The STMGT CI shall provide application programming interfaces (APIs) to support Retrieval Requests.
			S-DSS-21300	B	The STMGT CI shall provide application programming interfaces (APIs) to support Status Requests related to previous Insert Requests.
			S-DSS-21310	B	The STMGT CI shall provide application programming interfaces (APIs) to support Status Requests related to previous Retrieval Requests.
			S-DSS-30770	B	The DDIST CI shall provide an applications program interface to submit Distribution Requests, obtain Request Status for Distribution Requests, and retrieve a list of Distribution Requests submitted.
EOSD5200#A	ECS shall enable the addition of the following as required for discipline specific user support: unique fields to metadata, unique products for browse, and unique documents for data products guides. These activities shall not require software changes to ECS.		S-DSS-00570	A	The SDSRV CI shall provide the capability for operations staff to update Schema Information.
			S-DSS-03760	A	The SDSRV CI Schema Information shall include for each Data Type the structure of that Data Type.
			S-DSS-03770	A	The SDSRV CI Schema Information shall include for each Data Type the services available for that Data Type.
			S-DSS-03780	A	The SDSRV CI Schema Information shall include for each Data Type the Data Type Attributes for that Data Type and the Valid Values associated with each Data Type Attribute.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
EOSD5200#B	ECS shall enable the addition of the following as required for discipline specific user support: unique fields to metadata, unique products for browse, and unique documents for data products guides. These activities shall not require software changes to ECS.		S-DSS-00570	A	The SDSRV CI shall provide the capability for operations staff to update Schema Information.
			S-DSS-03760	A	The SDSRV CI Schema Information shall include for each Data Type the structure of that Data Type.
			S-DSS-03770	A	The SDSRV CI Schema Information shall include for each Data Type the services available for that Data Type.
			S-DSS-03780	A	The SDSRV CI Schema Information shall include for each Data Type the Data Type Attributes for that Data Type and the Valid Values associated with each Data Type Attribute.
			S-DSS-01450	B	The SDSRV CI shall provide application programming interfaces capable of supporting the development of extensions for the addition of Metadata fields that are unique to the data maintained at a specific DAAC.
			S-DSS-10230	B	The DDSRV CI shall provide application programming interfaces that support addition of documents for use as Guide data for DAAC-specific Data Products.
			S-DSS-10260	B	The DDSRV CI shall provide application programming interfaces that support development of extensions for addition of documents for use as Guide data for DAAC-specific Data Products.
EOSD5210#B	ECS shall enable development of a local user interface that accesses the core metadata and browse data base servers, bypassing the delivered "core" user interface. This server interface shall be configuration controlled and documented for the programmers' use.		S-DMS-00900	B	The LIMGR CI shall provide an application program interface for the submission of Service Requests.
			S-DMS-10900	B	The DIMGR CI shall provide an application program interface for the submission of Service Requests.
			S-DMS-21000	B	The DDICT CI shall provide an application program interface for the submission of Service Requests.
			S-DSS-00250	B	The SDSRV CI shall provide an application program interface for the submission of Service Requests.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
EOSD5220#B	ECS shall enable addition of new storage devices, if required, to serve discipline-unique and site-unique archiving needs. An applications programming interface that permits the DAACs to integrate this addition to the DAAC shall be developed and configuration controlled.		S-DSS-21280	B	The SDSRV CI shall provide application programming interfaces (APIs) to support Insert Requests.
			S-DSS-21290	B	The STMGT CI shall provide application programming interfaces (APIs) to support Retrieval Requests.
			S-DSS-21300	B	The STMGT CI shall provide application programming interfaces (APIs) to support Status Requests related to previous Insert Requests.
			S-DSS-21310	B	The STMGT CI shall provide application programming interfaces (APIs) to support Status Requests related to previous Retrieval Requests.
EOSD5230#B	ECS shall enable the addition of new data types similar to previous types with minimal changes to the software of the core system.				
EOSD5240#B	ECS shall enable addition of new data types significantly different from previous types with minimal changes to the core architecture.		S-PLS-60610	A	The PLNHW CI shall interface with the ISS.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
EOSD5250#A	ECS shall enable access to configuration controlled applications programming interfaces that permit development of DAAC-unique value added services and products where DAAC-unique value added services may consist of one or more of the following types of developments: a. Visualization utilities and products b. Data sets and inter-data set usability utilities and products c. Data analysis utilities d. Special subsetting capabilities (e.g. dynamic) e. On-line analysis functions f. New search and access techniques g. Data acquisition planning and utilities h. Experimental QA techniques i. Non-digital data utilities and products j. System Management Functions		S-DSS-03760	A	The SDSRV CI Schema Information shall include for each Data Type the structure of that Data Type.
			S-DSS-03770	A	The SDSRV CI Schema Information shall include for each Data Type the services available for that Data Type.
			S-PLS-01610	A	The PLANG CI shall be developed with configuration controlled APIs that will be capable of supporting development and integration of new algorithms developed at DAAC to support DAAC value-added production.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
EOSD5250#B	ECS shall enable access to configuration controlled applications programming interfaces that permit development of DAAC-unique value added services and products where DAAC-unique value added services may consist of one or more of the following types of developments: a. Visualization utilities and products b. Data sets and inter-data set usability utilities and products c. Data analysis utilities d. Special subsetting capabilities (e.g. dynamic) e. On-line analysis functions f. New search and access techniques g. Data acquisition planning and utilities h. Experimental QA techniques i. Non-digital data utilities and products j. System Management Functions		S-DSS-03760	A	The SDSRV CI Schema Information shall include for each Data Type the structure of that Data Type.
			S-DSS-03770	A	The SDSRV CI Schema Information shall include for each Data Type the services available for that Data Type.
			S-PLS-01610	A	The PLANG CI shall be developed with configuration controlled APIs that will be capable of supporting development and integration of new algorithms developed at DAAC to support DAAC value-added production.
			C-MSS-36800	B	The Management Agent Service shall have the capability to receive from the ASF, statistical and accounting information in ECS's standard API format.
			S-DSS-00250	B	The SDSRV CI shall provide an application program interface for the submission of Service Requests.
			S-DSS-00264	B	The SDSRV CI shall provide an application program interface which permits DAAC operations staff to link special subsetting capabilities into a Science Data Server.
			S-DSS-01450	B	The SDSRV CI shall provide application programming interfaces capable of supporting the development of extensions for the addition of Metadata fields that are unique to the data maintained at a specific DAAC.

EOSD RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
EOSD5300#B	ECS shall provide APIs and infrastructure for science user extensions and direct search and access to data.		S-DSS-00250	B	The SDSRV CI shall provide an application program interface for the submission of Service Requests.
			S-DSS-01450	B	The SDSRV CI shall provide application programming interfaces capable of supporting the development of extensions for the addition of Metadata fields that are unique to the data maintained at a specific DAAC.
EOSD5410#A	ECS shall enable the existence of additional ISTs if desired by the PI/TL to accommodate Co-Investigators and Team Members, who may be at geographically separate locations.		F-FOS-00605	B	The FOS shall enable the existence of additional ISTs if required by the PI/TL to accommodate instrument team members, who may be at geographically separate locations.
EOSD5410#B	ECS shall enable the existence of additional ISTs if desired by the PI/TL to accommodate Co-Investigators and Team Members, who may be at geographically separate locations.				